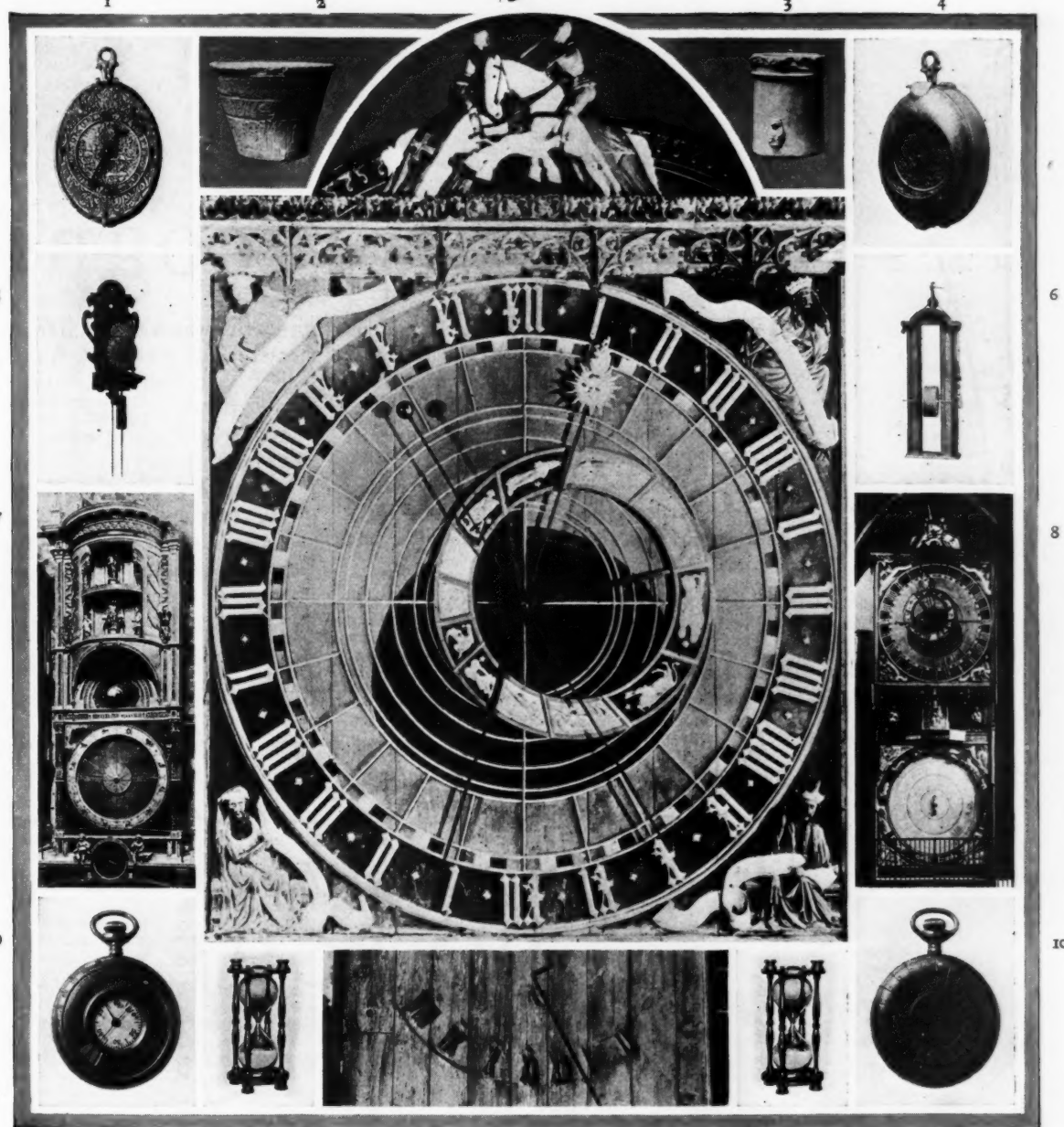


THE YOUTH'S COMPANION

HUNDREDTH YEAR

1926

AUGUST 12



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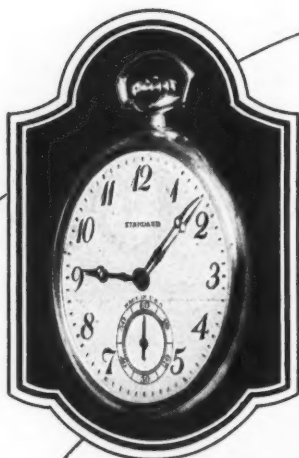
1—The first pocket watch, more than 400 years old. 2 and 3—Ancient Egyptian water clocks. 4—Reverse of the watch shown in No. 1. 5—Old Dutch lantern clock. 6—Seventeenth-century clepsydra, or water clock. 7—The famous clock of Strasbourg Cathedral.

8—The clock of Lund, Sweden; its face is shown in detail in the large center picture. 9 and 10—Face and back of Giusto's watch, which records the time in every part of the world. 11 and 13—Old hourglasses. 12—Old sun dial on Shriver's mill, Union Mills, Maryland.

In this Issue •• Stories by Jonathan Brooks, J. W. Marshall, G. R. O'Reilly, and David Loraine and A. F. Henderson •• The Wonder Story of Steinmetz-V

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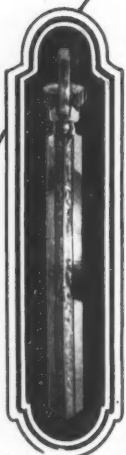
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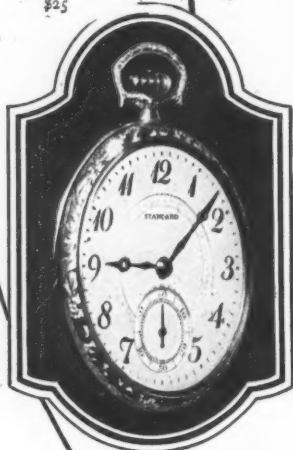
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THE YOUTH'S COMPANION

VOLUME 100

NUMBER 32

"DAMS," said Colonel Wagner, commandant of Lockerbie Hall, to his assistant, while going through his mail one May morning, "will you send for Jimmy Byers before taking this dictation?"

When Adams returned, Colonel Wagner, a gray-haired man, took up his correspondence.

"Let me give you a letter to William J. Armstrong, President, Universal Metal Corporation, New York City. Dear Mr. Armstrong," he began in a crisp tone. "Thank you for your letter returning the copy of that review of the book on railroad organization. I am glad to know you found it so interesting that you have purchased the book. You will be interested in knowing that this review was written by young Jimmy Byers. He is the youngster whose sportsmanlike example put your son, Billy, on the right track. You doubtless recall the boxing match. I told you how, through Byers, Billy learned something of discipline and teamwork. There is a new development.

"This boy, Jimmy, is the son of an Army major, an old friend of mine stationed in the Philippines. He has no family, except this boy, and he has only his Army salary. The boy does not wish to try for West Point, and I am trying to land him a scholarship. I have sent this review of the railroad book to the dean of the school of commerce at Jordan University, in the hope that the dean will be interested and find him a scholarship."

Finishing, Colonel Wagner leaned back in his chair and turned to look out the window. Whether he was studying signs of spring on the Lockerbie campus or meditating over the suggestion for action by Mr. Armstrong in his letter, cannot be told.

His assistant answered a call at the door and opened it, to announce Jimmy Byers. The boy, a sturdily built youngster just passing seventeen, with a straightforward look in his eyes and a firm chin, advanced to the Colonel's desk.

"Sit down, Jimmy," said the Colonel.

"I want to talk to you," said Jimmy.

"Yes, sir," Jimmy replied, taking a chair beside the desk.

"I have reread that review you wrote," said the Colonel, "and liked it very much. You evidently got out of the book what there was in it. Now then, I'd better tell you what I've done. I've written the dean of Jordan University, inquiring about scholarships," the Colonel resumed. "He is at the head of the school of commerce. You seem to have a liking for commercial affairs, and I'm glad to see it. I do not know whether we can get you a scholarship, but there is no harm trying. How would you feel about it?"

"All right," said Jimmy. "It's nice of you to go to so much trouble, sir, and I appreciate it. If I could land a scholarship, I'd work my head off to make good."

"No doubt about that," laughed the Colonel. "Fact, I'm afraid you'd work too hard. I've never seen you do anything easily, even play."

"Well, maybe so," Jimmy flushed. "But then Dad always said, if you wanted to do anything at all, do it your best and hardest."

"What word have you from the Major?" the Colonel asked.

"Bad news, and I'm worried," said Jimmy. "Had a letter this morning that sort of bothers me. I'm afraid something's happened to him."

"What does the letter say?" queried the Colonel. "Let's not worry too soon."

"You might read it, sir," and Jimmy handed the letter to Colonel Wagner.

"Dear Jim," he read, half aloud, "I can write only a short note, because I'm still in the hospital. Something wrong with my stomach, and the medico says I'll have to be operated upon. It's nothing serious, and I'll be all right before long. But if anything happens, you'll go right along and be the good, hard-hitting, square-shooting man I know you're going to be. I'll write again for the next mail and hope to tell you I'm on the mend. Inclosed



"He's a real fellow," Jimmy thought, as he walked along behind Mr. Armstrong, the rich man who got up early in the morning, drove his own car, was not fat

Jimmy Come Jim

By JONATHAN BROOKS

Illustrated by GEORGE AVISON

is a check. Remember me to Colonel Wagner. Your old Daddy."

"You see," said Jimmy.

"Why, boy, that's nothing to worry about," smiled the Colonel. "Naturally, before an operation, he'd send such a message. But he says it is nothing serious."

"I know he does," Jimmy agreed.

"Well, then—"

"But I think he said that to cheer me up," Jimmy insisted.

"What makes you think so?" asked Colonel Wagner.

"You won't think I'm—well, sort of childish?" Jimmy asked. "It's this—he calls me 'Jim,' where he always called me 'Jimmy.' And he signs himself 'Daddy' instead of 'Dad.' I don't know how to explain it, sir. Sounds foolish. But it's as if he wants to make me the man, and himself the one that needs somebody to lean on, and—you understand, sir, don't you?"

"I think I do, Jim," replied the Colonel gravely. He rose, stepped around his desk and placed a hand on the boy's shoulder. "The Major knows you can be the man, Jim, and so do I. But it has not come to that, so let's not worry. The next mail will bring good news."

"I can't thank you enough, sir," said Jimmy, rising. "Don't like to be so much bother, but I'm certainly grateful. Dad will be, too, when I tell him."

"Give him my regards; and good-by," said Colonel Wagner.

When Jimmy left the room Colonel Wagner resumed his seat and once more gazed out the window. Finally, he blew his nose, adjusted his glasses and resumed his dictation.

WITH examinations at hand, Lockerbie was a busy place. Sports activities were suspended, and all the boys dug into their books. Jimmy put all his time on his work. Les, finding him absorbed, sought out Billy Armstrong. One evening, about two weeks after Jimmy had been called to the Colonel's office, Les and Billy came in together. Jimmy had just mailed a letter to his father.

"Well, Jimmy," said Billy, as Les closed the door, "work will be done day after tomorrow. We'll all be pulling out, and we, Les and I, don't want to leave you here. He'll go to my house to visit. What do you say?"

"Now, listen, Billy; I don't want to be unsociable," began Jimmy.

"We know you don't," Billy interrupted.

"But I oughtn't to go," said Jimmy. "I'm waiting for a letter from Dad. He's just been operated on, out in the Philippines, and if I went it would seem like leaving him in the hole."

"Is it anything serious?" asked Billy. "Your mail could be forwarded. Get it the next day. And besides—well I don't think you are going to get any bad news."

"I'd better not go, Billy," said Jimmy, finally. "Much obliged, anyhow. Awful nice of you to ask me."

Just then they heard a rapping at the door, and Les answered it by calling to the knocker to enter. Another cadet came in.

"Colonel Wagner would like to see Byers and Moore," he said.

"You guys been up to something," began Billy. But, noting that Jimmy looked at Les apprehensively, he switched his tone.

"Hope nothing is wrong, Jim."

The Colonel rose from his chair, seeming even more grave than usual.

"Sit down, boys," he said. "Moore, I had to see Jim, and I thought perhaps you might not mind coming along."

"I was glad to come, sir," Les replied.

"I have some news," resumed the Colonel.

"Anything about that scholarship?" asked Les, hopefully.

"Yes; but first, there's a letter from the Philippines," the Colonel explained.

"Is it what I was afraid of?" asked Jimmy, sitting forward in his chair.

"Yes, and I'm sorry, Jim," said the Colonel, in a gentle voice.

Jimmy stared at the Colonel for an instant and then slumped back.

"What does the letter say, sir?" asked Jimmy, taking a shuddery breath.

"The operation was more serious than your dad admitted in his letter, Jim," said the Colonel. "The Major failed to rally. My instructions were to notify you, to say all arrangements have been made, that you will have everything the Major's family is entitled to from the Army. The details will come later, and we can talk another time, Jim."

"Yes, sir," replied Jimmy, absently. "Don't you, a-hum, uh, want to cry?" asked the Colonel, awkwardly.

"Don't hold back, Jim, on my account. I know how you feel." Colonel Wagner, with all the sympathy in the world, was undertaking a new duty for him. He had comforted strong men, but this was the first time he had undertaken to console a boy.

"Oh, no, sir," said Jimmy. "You see, I sort of expected it. I—I kind of prepared. Dad made me think it. But it's hard to get used to the thought."

"I know it is, Jim," the Colonel agreed. He arose from his seat and walked to Jimmy's chair. A hand on Jimmy's shoulder, he continued: "But you can carry on like a man. Your dad, the Major, knew you would, Jim."

To this Jimmy said nothing. After a long pause, during which all three, the two boys and the elderly Colonel, sat ill at ease, Colonel Wagner spoke again.

"I am awfully sorry, Jim," he said, "that, if the Major had to be taken, he could not have lived to hear the good news. I am sure he would have been as much pleased as you will be when I tell you what I have to tell."

"What is that, sir?" asked Jimmy, dully, if respectfully. He could not take his mind away from the news from the Philippines.

"A letter from the dean of Jordan University today," exclaimed the Colonel, leaning forward with pride and gratification in his expression, "says that he has a scholarship for you, available beginning next fall!"

"What's that, sir?" asked Jimmy, unable to believe the statement.

"He has a scholarship, paying practically all your university expenses, that he can award to you if you will signify your willingness to accept it and use it beginning next fall," explained Colonel Wagner. "It covers their full course in commerce and permits you to specialize in railroads, manufactures or merchandising."

"But I don't understand why—" Jimmy began to protest.

"That railroad history review you wrote won it for you," said the Colonel. "I was proud of that piece of work, and I'm proud that the scholarship is there for you. It is the first thing of the kind that has ever come to a Lockerbie boy. If only your dad could know about it—"

"I don't know whether Dad would want me to take it or not," Jimmy interposed when Colonel Wagner paused. Except for the fact that the boy was still struggling to control himself, it might have been said that he wore a stubborn, even a sullen air. "My dad wouldn't want me to take charity, and I wouldn't take it myself, either."

"That's a crazy way to look at it," spoke up Les Moore, brusquely. "Let somebody offer me a scholarship, and see how quick I take it."

"Nobody's offered you one," laughed the Colonel.

"And I guess nobody will, either, the way I've been studying," grinned Les, in embarrassment. "But if they did, I'd sure grab it, whether my folks could afford to send me or not."

"Well, there's no hurry about this thing, Jim," said Colonel Wagner. "You think it over. I believe it is a wonderful opportunity, and I feel that you are entitled to it. Take your time, Jim. Think it over tonight."

"I will, sir," said Jimmy, rising.

STURDY, slow-thinking Les Moore worried as to the best way to comfort Jimmy and make him forget his sorrow.

Awkward and ill at ease, he finally stumbled on the best possible way to take Jimmy's mind off his trouble. He started a conversation about the offer of a scholarship.

"The way I look at it," he announced, positively, "you'd be a big fish not to take that scholarship."

"Yeah, and I'd be a fish to bite on it, too," retorted Jimmy.

"How'd you get that way?" Les demanded.

"Well, where do these scholarships come from?" Jimmy countered. "Some rich guy has more money than he knows what to do with; so he gives a bunch of it to some college. And the college gives it to a bunch of guys that can't afford to go to school on their own hook."

"Some guy that's heavy enough in the head to deserve it," began Les.

"Some guy that's willing to be a beggar, and take charity, and no questions asked," Jimmy continued. "Never mind how the rich bird got his coin—whether he stole it, or what. Go ahead and take his scholarship, hey? Well, not for me!"

And that evening, after dinner, the discussion continued. Billy Armstrong dropped into their room and became involved in a three-way argument which, if it did not sound as scholarly or as refined as it might, at least displayed some highly interesting types of human thought.

"Any time anybody wants to give me something for nothing," proclaimed Billy, "I'll be right there to receive it."

"Yeah, and any time you get something for nothing you'll find out it costs you a whole lot more than nothing," Jimmy retorted.

"Well, here, listen to me, will you?" demanded Les Moore, sprawled lazily on his bed. "You take Billy Armstrong, now. He's a friend of yours, Jimmy. Suppose his father should offer you the money to go to college on. He won't miss the dough, and you can use it. Would you take it from him, as a loan, or a gift?"

"Certainly not," said Jimmy, firmly. "He has no reason to want to give or lend me money. He doesn't know whether I can ever pay him back. He doesn't know what use I'd make of it. So it would be like giving a beggar an old hat, and I'm no beggar. I'll make my own way, even if I don't get as far as I would with somebody shoving me."

"Suppose my dad gave this university a fund, and the university offered the scholarship out of it," began Billy Armstrong.

"Same thing," snapped Jimmy. "You guys give me a pain. Why don't you move me into the poorhouse, and be done with it?"

The argument broke up in laughter at this sally, but Jimmy, tormented by the feeling of loneliness that followed word of his father's death, was serious. He wished Billy would go to his own room, and that Les would shut up.

EARLY next morning, after Jimmy Byers had spent a sleepless and lonely night tossing in his bed, his problem once more came up for solution and demanded an answer. What should he do? With Major Byers gone, and the support from his salary cut down to a pension, it seemed that his best move was to seek a job. But what job, and where? What sort of work could he do, to earn a living? It was the day before commencement, and on the morrow Jimmy would be graduated from Lockerbie. "Commencement," mused Jimmy, before piling out of bed, "but where do I begin?"

A few minutes later, tingling with the reaction from the cold water, he ran back into the room intent on jerking big Les Moore out of bed, but to his surprise he found Les sitting up sleepily and trying to talk to two visitors. One of them was Billy Armstrong, and the other was a tall, spare man of middle age, unmistakably Billy's father.

"Hey, Jim, want you to meet my dad," said Billy. "Father, this is Jim Byers."

"I hope you'll excuse us for not being dressed," said Jimmy, grinning in embarrassment, as he offered a hand to Mr. Armstrong. "C'mon, Les, snap into it."

"Oh, that's all right; I had to pull Billy out of bed myself," smiled the older man. "Sorry to run in on you boys this time of day, but I started driving up here yesterday afternoon from New York and couldn't make it. I stopped down the valley at a hotel about forty miles from here, and then got up and drove the rest of the way this morning. Wanted to eat breakfast with you fellows, if you'd ask me."

"Sure thing," said Jimmy. "Glad to have

you. I'll be dressed in a minute, and it won't take Les more than half an hour." So saying, he threw his cold, wet wash rag in his buddy's face and dodged into a closet. Les shook his head, grinned and hurried out to the showers. Both boys were dressed in their neat cadet uniforms within ten minutes, Les catching up with Jimmy, because Jimmy's thoughts were not on speed. He was wondering what kind of rich man it was that could get up at three or four o'clock in the morning and drive forty miles before breakfast.

After they had eaten in the common dining-room, the four went out for a stroll over the campus.

"Are you fellows busy this morning?" asked Mr. Armstrong, presently.

"No, sir, classes are finished," said Jimmy. "Drill at eleven o'clock," added Les.

"Then I wonder if you'd mind going with me to see Colonel Wagner for a little while?" asked Mr. Armstrong.

"Sure, we'll go with you," said Les, "if you like." Jimmy merely nodded.

"He's a real fellow," Jimmy thought, as he walked along with Les behind Billy and Mr. Armstrong. He noticed the older man's square shoulders and thin frame, the wrinkled, tanned skin of his neck. "Never had a massage in his life, I'll bet," Jimmy mused. Got up early in the morning. Drove his own car. Was not fat. And yet, he remembered, Billy Armstrong had certainly acted like a rich man's spoiled child.

Colonel Wagner greeted them with manifest pleasure, welcoming Mr. Armstrong and laughing at his story of his own early rising in order to be with the boys, and then finding two of them still abed.

"I can guess which one was up and about," smiled the Colonel, looking at Jimmy.

"Didn't sleep very well, sir; so I just got up earlier than usual," Jimmy explained.

"Well, I can understand that," Colonel Wagner replied. "I wonder that you slept at all, and I've got an idea about it, Jim. Do you mind talking it over again? My notion is that you won't be happy until you've figured this thing out; so let's see if we can't reach some plan. Mr. Armstrong might be interested, and I know he could give us some good advice."

"I'm very free with advice," laughed Mr. Armstrong, "although I never took any in my life. Always was stubborn, that way."

"What do you say we sit down out here on the steps?" suggested the Colonel. "It's too pleasant outdoors to be in the house. Now then," as they found seats for themselves, "Mr. Armstrong, to tell you the story: Major Byers, an old friend of mine, and Jim's father, failed to recover from an operation, and we got the news from the Philippines yesterday. Jim had been rather expecting it, because he read between the lines of his father's last letter."

Jimmy, looking out across the campus, remembered how his father had called him Jim and noted that Colonel Wagner now continually referred to him as Jim instead of Jimmy. He felt a strong, lean hand on his shoulder, and knew it was that of Mr. Armstrong, who was sitting on the step above him.

"Now, before Jim had a chance to wonder what he would do, since Major Byers, like many an Army officer, had little to leave," explained the Colonel, "we get word that Jordan University will award Jim a scholarship if he will accept it. This scholarship provides that he will receive practically all his expenses, if he will enroll in the school of commerce and specialize in some one subject. I'm anxious for him to accept it, because the offer is an honor to him and to Lockerbie, and because I'd like to know his plans are settled before he leaves here. But Jim can't quite make up his mind. Is that about the way of it, Jim?"

"Yes, sir," replied Jimmy, "except for one thing: I did make up my mind, not to take the scholarship."

"What? Not take it?" echoed Mr. Armstrong. "Why not?"

"Oh, there's no use bothering you with my troubles, and you wouldn't be interested," protested Jimmy.

"But I am interested, several ways," exclaimed Mr. Armstrong, with a nod to Colonel Wagner that indicated that he wished to try his hand at settling the situation. "In the first place, you're a friend of Billy's, and Billy's my boy. In the second place, the Colonel sent me your review of that railroad book, and I liked it so well I bought the book and read it. Now then—let me get this all straight. I never sell a thing without making sure the buyer knows

what he is getting, understand? That's the only honest way to do business."

"I know your story, and here's mine. I used to have all kinds of trouble with railroads in my business, because I didn't understand them. Once I got so mad at a railroad I lit in and built one for myself to do the work I wanted that other road to do. Then I found out, as a railroader myself, what the other road was up against trying to get my business some service. When I read this book, I thought, if every business man could know railroads as this writer does, business and the railroads would both be a lot better off. The man that wrote it has done a big thing, understand?"

Jimmy, listening intently to the magnate's rapid-fire flow of words, picked up a growing interest in the man as well as the story he told.

"So I found out who the man is," continued Mr. Armstrong. "He is the dean of the school of commerce at Jordan University. And I sat right down and wrote, or dictated, a letter to him. And I told him what I'd gotten out of his book, and that I'd like to help him get in a position where he could write more such books, or turn out young fellows who can, youngsters that know what the business world is, and understand it, see?"

"He wrote back that the best thing I could do would be to establish some scholarships for young fellows interested in this line of work; and here we are, right back where we started, on Lockerbie campus." And Mr. Armstrong paused, smiling, to get his breath.

"But I hope you didn't ask him for one for me," said Jimmy, flushing.

"No, sir, that would be Indian giving," Mr. Armstrong resumed. "I told him I could afford to establish three such scholarships, and then I told him, too, how I happened to be interested."

"I sent him a copy of your book review, Jim, you remember," spoke up Colonel Wagner.

"All the time, playing basketball, hockey, baseball—where'd you get time to read an extra book, I'd like to know?" muttered Billy Armstrong. Les Moore grunted.

"That's the whole story," concluded Mr. Armstrong, ignoring Billy's remark. "You can see, after all, I am interested. And I'm going to be very much disappointed if you don't take that scholarship."

"What do you say, Jim?" asked Colonel Wagner.

"Well, I don't know, exactly," said Jimmy, slowly. "It's pretty much of a problem, sir. I think it's wonderful of Mr. Armstrong to do this, and I don't want to be ungrateful,

sir. But don't you see, I can't take it? It's a lot harder to receive, than it is to give, Mr. Armstrong. I'm not a beggar. I can stand on my own feet—"

"That's just the point," exclaimed Mr. Armstrong, interrupting. "The strong fellows are just as much entitled to encouragement as the weak ones—or more so."

"And then, my dad wouldn't want me to accept something for nothing—"

"Jim, let me say something right here, will you?" asked Colonel Wagner. "I knew your father. He did the same thing I did. He accepted a military education, because he thought he could repay the government in service. And he more than repaid. You have earned this chance, and you can—"

"Pay me back by going into the business world with the understanding I could have used very handsily when I started out," interrupted Mr. Armstrong. "And pay back the dean and the university, in the same way. Don't you see? It's not a case of a beggar, or something for nothing, by any means."

"Well, I never thought of it that way—I mean, as you've just described it," muttered Jimmy Byers, uncertainly.

"Whoopee!" yelled burly Les Moore. "Jim hasn't got a leg to stand on."

"Let him up; he's learned something," chuckled Billy Armstrong.

Jimmy, unable to vent his emotions in any other way, suddenly knocked off Billy's cap with one hand and punched Les in the ribs with the other. Then he blushed like a child caught in mischief. Before he could address his elders again Billy spoke up.

"Hi, Les, where you going to college?"

"Jordan," the big chap spoke positively.

"Dad," said Billy, "mother still wants me to go to Yale or Harvard."

"How many votes for Jordan can we muster?" countered Mr. Armstrong.

"Two," exclaimed Billy, joyfully. "Listen, fellows, we can all three—"

"Say, it's five minutes to drill time," said Jimmy. "We've got to beat it."

"Dad, you come over to the dorm before lunch," Billy flung over his shoulder, as the three boys scuttled away. Down the walk they hurried, leaving Mr. Armstrong and Colonel Wagner to watch them out of sight and smile and nod at each other in appreciative, sympathetic understanding.

"Do you remember what the Lieutenant said on the way home from that hockey game—about 'The Three Musketeers'?" asked Jimmy.

"That's—" began Les.

"Us!" all three shouted in unison.

Then they broke into a run, to reach drill in time.

The Jaguars of Tamana

By G. R. O'REILLY

Illustrated by CLARENCE ROWE



Some big animal dropped from the rock above my head, señor! It was a jaguar!

PABLO ESCARRA, the Venezuelan jaguar hunter, was as mild mannered a man as ever I met. Like most of the people of Spanish America, he was a natural gentleman. And yet Pablo was an Indian, only a few generations from savagery. He was mild mannered, as I have said, but he was more; for he was courteous and affable. And yet, for all his meekness, his dark face had in it that which showed the spirit of the master man, the overlord of creation.

Had he not ducked behind a great log in the path of a charging jaguar and with his razor-edged machete, slit the brute beneath from neck to tail as it passed over him? In the face of another, he brought down his machete, slashing as it jumped on him, and cleft its skull in twain; and he and the dying beast lay in a heap together, where the force of its impetus threw him, and escaped with but scratches.

This story of the jaguars of Tamana is Pablo's, and not mine. One night, over our camp fire in the Venezuelan forest, he told it to me. The red light of the fire gleamed on his teeth and in his eyes and brightened up his eagle face as he talked, seated with his back against a tree. Beyond our circle of light, was the darkness of the tropical wilderness.

"TWAS three years ago, señor, said Pablo, that Don Manuel Artega sent for me, to rid him of a family of jaguars that were destroying his sheep. He lives in a big stone house well up in the mountains on the Colombian border, and the country around there is not so much covered with woods as it is here; but it is very rough and broken with rocks and ravines, with plenty of grass and low bushes all about. There is one great ravine called the Canyon de Tamana, and it was there that the scene of these adventures lay.

Now you must know that this Canyon

de Tamana is very deep, fully four hundred feet, and it is about the same width across it from wall to wall. Its sides are walls of rock, straight up from the bottom. It is probably ten miles long; and nowhere is there any way of getting into it or out of it, except at one place, and this way is so very difficult and dangerous that people used to say nothing ever went up or down it except one billy goat belonging to Don Manuel.

This animal was so wild that he would never let any one catch him; when pursued he would go down this pathway, where none dared to follow. He often went down there, and would come back after a while; but one time he went down and never came back any more; so it was supposed that the jaguars caught him, because, from that time on, they began to eat up the sheep. Because the goat used it they call the path Escalera del Cabrón, or "Billy Goat's Ladder."

At the time I got the message from Don Manuel I was down at San Fernando on the Apurí; and, as it was the rainy season, it took me three long weeks on the road up into the mountains, because, you see, the rivers were up, and one sometimes cannot cross for a few days till the water goes down somewhat.

From what Don Manuel told me after I arrived, I made up my mind that the jaguars probably came out of the Canyon de Tamana; very likely they went up and down the Escalera del Cabrón. So, early next morning, I took my rifle and cutlass and set out alone. The sun had not yet appeared over the mountains, but his light was in the sky. I walked near the brink of the canyon and looked down into it. It was certainly very deep. There were some trees in it, but not many, because the water, when it rained heavily higher up in the mountains, would rush down through it and tear them away before it.

Along the brink I made my way until I got to the Escalera. It hadn't rained for two or three hours; so I looked for tracks on little bare patches of ground, to see if the jaguars really used the Escalera or not. I found only a single footprint, and that footprint was sideways to the entrance to the descent, so that there was nothing to tell me whether the beast had come out or gone down, or in fact whether jaguars ever went up or down at all.

To settle this question, and to see what kind of place it was, I let myself into the entrance through the cleft in the rock leading to it. I found it went downward sideways along the face of the cliff. At first it was like a great crack in the cliff with the bottom filled with earth and stones; then I came to a place where one side seemed to have fallen away, leaving only a ledge of the rock to walk on, the cliff wall running up on one hand, and nothing on the other but the tops of the trees and the canyon below. It was very dreadful to look down there from that narrow ledge.

I noticed that from this ledge, on which the path ran down, there were other little ledges running off horizontally along the face of the rock wall; and I stopped to think that one of these horizontal ledges would be a very good lurking spot for me in case I found that the animals used the Escalera.

One in particular took my eye as being so narrow that a jaguar could not walk it, although a man could, if he went sideways and leaned over toward the cliff. This ledge I marked as my own. It ran backward from

the pathway. A few feet farther down, the ledge where the pathway ran ended, and the crack began again, as at the head, so that there was rock again on both sides, and the path was broader and ran so straight that I could see down it for some two hundred feet. Boulders and rocks encumbered it every yard or so.

I stepped down from the ledge, and entered the great crack, and as I did so it was beginning to rain, so that I feared I should get a ducking. However, just after entering the crack, there was another drop of about

He stopped and turned round. I tried to give him a second shot, but the rifle jammed and wouldn't work. He stood for a second or two, as if wondering what had happened; and then, seeing the smoke, and my head moving in the hole, he came for me as hard as he could tear up over the rocks.

Believe me, I wasted no time over that jammed rifle. I got out of that hole, for I knew I was at his mercy there with my useless gun. I was out in a jiffy, scrambled up over the rock, ran back the few steps up to the horizontal ledge I told you of, and was



He crawled out upon the ledge and began to come toward me. Evidently he was determined to get me

well out of his reach on it, just as he arrived at the beginning of it.

He crouched low, as if to spring on me. Oh, señor! You should have seen him—his glaring eyes, his lashing tail, the lips bared from the snarling teeth—those whitish lips with their great coarse whiskers! There was blood on his nose and between the eyes. His ears were laid back. And the growls and spittings of him! Señor, I have killed many a jaguar; but never before could I see from a place of security how terrible they really are.

If my rifle had only been in good order and I had had it with me, I could have shot him where he crouched. But I had left the useless thing behind me when I ran from the hole under the rock. So now I had only my cutlass and could do nothing. But neither could he, for he couldn't get at me without tumbling to the bottom of the canyon. So I mocked him and dared him. I shouted at him. I laughed at him. I wagged my fingers at him. And, do you know, I believe he understood the dare; for he crawled out upon the ledge and began to come toward me.

When I saw this, I assure you, I stopped my daring him. Evidently he was determined to get me. He came on for fully ten feet, even where I thought the ledge too narrow for him to stand on. But it grew still narrower and there was a little projection of the cliff-face above it, where I had to stick in my toes and lean over inward, bending over the projection, with my hands up against the cliff-face. I saw clearly he could never pass this spot; so I dared him anew, and shouted at him and taunted him as before.

Oh, no! I was quite cool and not a whit afraid of him. He could do nothing but

growl and hiss and twitch his tail. He tried and tried to pass under that projecting bulge, but he couldn't manage it. He would put out one paw and advance it along the narrow ledge, and then he would draw it back again. Then he would look down to the deep canyon below him.

HOW long this siege would have lasted I can't say, but something happened. There came the cry of another jaguar from above. I looked up, and there were the heads of two more of them, peering down at me from the ledge where the path ran above my head. The moment my enemy heard it he began backing away, and when he got out on the broad ledge where the path ran there were the pair that had come down to meet him.

I tell you he never waited to say, "Buenos días." Up went his tail, and he flew at them with a roar. *Hombre!* I tell you he made the fur fly with his claws for a second or two; and they scampered off up the pathway again, as hard as their legs could carry them. Seeing him do this made me understand the situation better. This jaguar of mine was a female, and she had cubs somewhere near; and I suppose she regarded the two intruding males as enemies, who would kill her young ones.

And I was just beginning to wonder, too, if I should ever get out of this fix alive. I looked round me almost in despair. Just above my head, my eyes caught sight of a stout sapling which grew out of a crack in the cliff and ran up, straight and clean, with little branches at the top. With great care, I quickly managed to cut and trim this little pole.

"Aha!" I said to myself. "Pablo, things look better."

Then I was ready for the she-devil.

Now, thought I, if I could get this between her and the rock wall, I could pry her off the ledge and send her toppling to the bottom of the canyon, two hundred feet below.

I stood then with my back to the cliff, drew a tall breath and, holding the pole to the outside of me, pushed it over to get it between her and the wall. But did I get it there? No! That old jaguar, she struck it with her paw and all but knocked it out of my hand. That would have put me in a pretty fix!

I began to tease her with the pole now, poking it in her face and pulling it back again. She didn't seem much pleased. She snarled furiously. Then she began to crunch it between her teeth and worry it backward and forward, like a great cat tearing at a fish. My trick, it worked, señor.

She shook so hard that all of a sudden she lost her balance, tottered, and down she fell, right off the edge, carrying the stick with her, and just missing me, Pablo, into the bargain!

That was a close call. I tell you, I was glad to get rid of that cat. I was afraid she would come back, for jaguars are hard to kill, señor. But she never came, nor did the two males show themselves again that day. So at last I ventured forth, got my rifle out of the hole and went back to Don Manuel's in time for breakfast.

When Don Manuel heard about it, what do you suppose he said? "Oh, Pablo!" he said. "I have always wanted a pair of jaguar kittens. You must get the little fellows alive for me. I'll have a cage built for them this very day."

tubs and found almost as much tar in them as there was on the ceiling. In the Pulaski flat below a radio was screeching forth ear-splitting jazz, and two of the older girls were dancing. Now and then one of them would crash against the wall, and the other would laugh shrilly.

Jack turned away with a scowl. "We've got to get out of here!" he said aloud. "It's no place for Pauline and Henry! No place for my mother!"

He entered his own room and gazed out the window through the tangle of telegraph wires at the coal yard on the other side of the street. He was wondering what sort of work there might be there for him, when the door opened and he heard the voices of his mother and his little sister.

"Hello, mother!" he called and ran into the hall.

"Jack!" she exclaimed, embracing him. "Why didn't you tell me you were coming? Pauline and I were over to the park. How long have you been home? How long are you going to stay?"

IT was a hot, sticky afternoon in June when Jack stepped off the train at Lambert station and, with his battered old straw suitcase, started on foot toward his home. He had not written to tell his mother that he was returning, and he smiled to himself as he tried to picture the look of pleasure that would come over her face at sight of him.

Reaching the "three-decker" on Pleasant Street, he entered the grimy vestibule and pressed the electric button. As he waited for the lock to click he frowned with disapproval at the unpolished, finger-stained brass letter-boxes bearing, in the slides underneath, the names of the three families—"Gundlach," "Pulaski" and "Farrington." The brown unwashed wall at the right was covered with chalk marks and black smudges made by pieces of charcoal or soft coal in the hands of children—crude caricature drawings and unsightly phrases: "You are a boob," "Mary Pulaski is no good," "Wait till I grab you, Willie!" And at the bottom was a rude drawing of a little girl

Jack Farrington's Beanstalk

By DAVID LORAIN and ARTHUR FLOYD HENDERSON

Illustrated by DUDLEY G. SUMMERS

Chapter VI. DOWN THE BEANSTALK

with pigtails. Jack's eyebrows came together in a frown as he read the name of his little sister Pauline, scrawled below it.

He turned and pressed the button again, savagely this time. Still the lock did not click, but a minute or two later the door opened, and a peddler came out. Jack entered and mounted the dark, ill-smelling stairs to the top floor. He rapped once on the door, then, since there was no response, entered with his key. "Everybody out," he muttered and, dropping his suitcase in the hall, strode into the kitchen.

Jack's first impression was a feeling of satisfaction at being home again; but gradually, as he gazed about, it left him and was replaced by a feeling of shame and discontent. In the year that he had been away the flat had visibly deteriorated. There were fresh stains on the ceiling where the rain had soaked through; the floor was still more worn and splintered; and the ugly gob of tar above the washtubs had widened and, under the heat of the sun, was letting go long slender threads that hung like miniature stalactites. He looked into the

"A long time," Jack replied, "maybe a year. Mother," he went on impulsively, "how soon could we pack up and move?"

Mrs. Farrington looked startled and bewildered. "Move?" she repeated. "Jack, what are you talking about? How can we move? Where could we find a better place for the same money?"

Jack turned to his sister. "Do you like it here, Pauline?"

"No, I hate it," was the quick reply. "Henry hates it, too. The children on Pleasant Street are not nice. They say awful things!"

Jack turned again to his mother. "I know you don't like it; and I know I don't. That makes it unanimous. What's the sense of staying in a place when nobody likes it?"

"But, Jack," she protested, "the rent is low—we couldn't do better anywhere else in town—we haven't the money—"

"We're going to have more money," Jack interrupted her. "I'll get it a job, and just as soon as we can manage it we're going to move!"

Mrs. Farrington made no reply; she only looked at her tall son and wondered at the change that had taken place within him. There was a different light in his eyes, a different set to his chin. Looking at him there in the dim, ill-smelling hall, Mrs. Farrington for the first time saw the man within her boy.

JACK FARRINGTON, like Jack in the fairy tale, had gained something valuable from his first trip up the beanstalk. From his contact with the giant—with New York City—he had acquired confidence in his own ability, courage to face hard problems and difficult situations, self-reliance, independence and more or less skill in reading character, or, as New Yorkers would say, in "sizing up the other fellow." Of course he didn't realize that he had acquired those qualities; he felt very much the same as he had felt before he went to the city.

The following evening he called upon Mr. Vincent at his home. The coach did not appear surprised when Jack told him he expected to remain in Lambert and find work.

"I had a note from Johnson Fales Smith shortly after you met him," the coach said. "He told me he had advised you to return to Lambert and make a name for yourself here before you tackled New York. 'Of course he wouldn't go back then,' Mr. Smith said, 'but he will before the year's up.' Mr. Vincent smiled. "So you see I wasn't wholly unprepared for you. Just what do you plan to do?"

"I'm going to see if there isn't a job for me at the Valley Coal Company," replied Jack.

"Why the Valley Coal Company?" Mr. Vincent inquired. "Why not Springer & Welch or the Thomas Buck Company?"

"Oh, I may try those later," said Jack. "The Valley Company is right across the street from where I live, and, well, I've spent so much time looking at the yards and hating the dirt and noise I just thought I'd like to work there, rather than at either of the others."

Mr. Vincent's eyes twinkled. "Go to Frank Bemis—he's the owner, manager and about everything else at the Valley—and tell him I sent you. He was looking for some one a week ago; possibly the job is still open."

The next morning Jack crossed the street and, entering the Valley Company yards, made his way among huge piles of coal, long rows of stacked cord wood and roaring and creaking trucks and wagons until he reached an unpainted low shack with the word "office" above the open door. He entered and looked about him in vain for some one to speak to. The place was roughly furnished with two desks, a telephone, a battered Underwood typewriter, and a small bookcase crowded with ledgers and loose papers. Coal dust was everywhere—on the floor, on the desks, on the battered typewriter, in the very air he breathed.

"This is the office all right, but where's Mr. Bemis?" he said to himself.

The morning was intensely hot, and Jack felt as if he were in an oven—a feeling that was enhanced by the great piles of coal and wood that he could see through the grimy windows.

The telephone rang. Jack waited several moments; then, since no one came in to answer it, he crossed to the bigger of the two desks and took up the receiver himself. "Valley Coal Company," he said.

"This is Mr. Watkins, number fourteen Putnam Terrace," said a voice. "I want six

tons of nut coal. Can you deliver it Wednesday?"

"I'll have it for you," said Jack. "Thank you." And with a smile he noted the order on a piece of yellow paper.

He was just getting up from the desk when the telephone rang again. This time it was a woman's voice, and she wanted a ton of buckwheat and eight tons of stove coal. Jack noted the order under the first one.

"Can you deliver it tomorrow?" asked the woman.

"Yes, ma'am," said Jack.

He hung the receiver on the hook and mopped his forehead with his handkerchief. Glancing up, he observed a big burly man in a black shirt standing in the doorway. His hair was gray and curly and abundant, his face broad and red, his eyes blue and prominent. Jack jumped hastily to his feet.

"Mr. Bemis?" he asked.

"Yes, I'm Frank Bemis. What's your business here?" The man stared hard at Jack, who returned the look without flinching.

"I'm Jack Farrington," he said. "I came to see you about a job here in the office—Mr. Vincent sent me. Nobody was here, and I answered the phone—took two orders for fifteen tons of coal." Jack passed the memorandum to him.

Frank Bemis glanced at it, then passed it back. "Sit down and copy it off," he said gruffly, "then take it to Joe Murphy at the platform. When you come back we'll see about a job for you."

Jack was elated. While Mr. Bemis was busy with the telephone he copied off the order and then hurried out into the yard with it. By dint of inquiry he found Joe Murphy and turned the slip over to him; then he hurried back.

Bemis was bent over the battered typewriter, striking the keys with his two big forefingers. "Can you run one of these machines?" he demanded of Jack.

"Yes, sir."

"Willing to work hard for sixteen a week?"

"Yes, sir."

"Take off your coat," said Bemis.

And so Jack began his first week's work with the Valley Coal Company.

Before the end of the day he learned that Mr. Bemis's clerk had just left him without giving notice, and consequently the manager was short-handed. "He was a white-collar man," Mr. Bemis explained; "too much dirt for him. Glad he's gone, but he left me in a fix. Hope you're not that kind."

be away from the office for hours at a stretch, and at such times Jack, alone with no one to turn to for advice, had to make decisions on his own responsibility. On the whole Mr. Bemis was pleased with what Jack did, and more and more, as he saw that the boy was industrious and conscientious, he came to depend upon him.

Mrs. Farrington too was beginning to depend more fully upon her son. The sixteen dollars that Jack put into her hand every Saturday was a tremendous help; but what pleased her even more than that was the way he discussed household matters with her, the interest he showed in his small brother and sister. The fact is, Jack was beginning to take the place of his father.

One Sunday afternoon, when Henry and Pauline had gone to the park together to listen to the band concert, Jack said to his mother, "I want you to take a walk with me. I've something to show you."

Half an hour later they reached Elm Street, and Mrs. Farrington began to feel a queer tightness in her throat. This was the street in which she had lived in those happy days when her husband was alive. There was the very house they had lived in—a little white-shingled cottage with roses in the front yard. She wondered if her boy knew—

"Mother," said Jack,—they had stopped in front of the little house, and he was holding her arm,—"mother, I've rented this little cottage. We can move in the first of September."

Mrs. Farrington uttered a surprised little cry, and her eyes suddenly filled with tears.

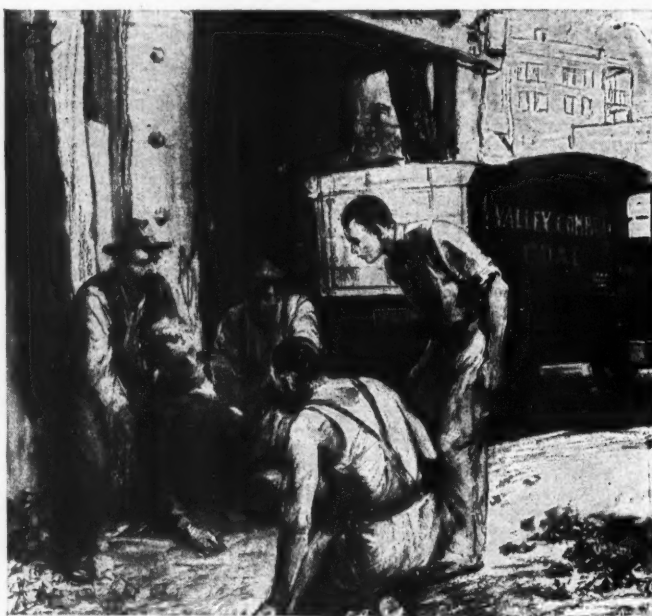
Jack went on hastily: "I knew we all lived here once and were happy, though I was too young to remember it. About ten days ago I learned accidentally that the people who live here now wanted to get out. Well, I scouted around, found how much the place rented for, and then paid a deposit. Is it all right, mother? Tell me, is it all right?"

"But, Jack, are you sure—"

"Oh, we can manage," he assured her. "We'll have to live close at first; but after a while I'll be making more money—and some day, mother, I'll buy this house for you!"

The tightness in Mrs. Farrington's throat held her silent, but in her heart was love and gratitude—and pride in her boy, which is a mother's sweetest possession.

JULY passed, and August came, bringing with it talk of a coal strike in the fall.



Frank Bemis made a grimace as Jack bent over him. "You'll have to swing it alone, my lad," he said hoarsely. "Go ahead—keep things moving!"

"I'm not afraid of dirt," said Jack. And he decided that the next morning he would wear his old clothes and a khaki shirt.

JACK'S duties consisted mainly of taking orders for coal and wood, answering complaints over the telephone, making out bills on the typewriter, sending out printed circulars advertising the price of coal, running errands about the yards and performing various other tasks that Mr. Bemis required. Often the manager was obliged to

"Let 'em strike," said Frank Bemis one morning when Jack showed him an article in the newspaper. "Our yards are full; and that's a whole lot more than Springer & Welch or Tom Buck can say."

"Just the same," said Jack, "I think we ought to order another big shipment. There's going to be a strike sure, and it may last a long time."

"You're right," agreed Bemis. "When do they vote?"

"A week from today."

Frank Bemis's blue eyes narrowed, and he smiled grimly. "Soon as we're sure, the price goes up."

Jack pondered the remark during his noon hour. He didn't like it. Just when coal was scarce, just when people needed it most, then up went the price. That was always the way. And who suffered from it? Not the rich—no, never the rich! Always the poor—folks like his mother, whose means were limited. It was the same way with everything, particularly money. If you had lots of it, the banks would always lend you more. If you had none, no one wanted to lend you a cent. Jack frowned. Through his mind flashed the words: "Unto every one that hath shall be given, and he shall have abundance; but from him that hath not shall be taken away even that which he hath."

During the following week at the office Jack had little time to think of anything outside his own duties; people had already taken fright, and orders for coal were pouring in right and left.

True to the prediction, the unions voted for a strike, and the order was issued to take effect immediately. And just at that very important juncture Frank Bemis met with an accident.

Jack was preparing copy for a fresh set of circulars to customers when Joe Murphy's grimy, sweat-stained face appeared at the window. "Farrington," he yelled, "come out here! The boss has busted his collar bone."

Disregarding the telephone, which had begun to ring, Jack ran from the shack and followed Murphy to the platform, where he found Mr. Bemis, evidently in great pain, supported by two of the drivers.

"He fell from the platform, and Burke's truck backed against him," said one of the men. "We sent for an ambulance. Here it comes now. There's internal injuries too."

Frank Bemis made a grimace as Jack bent over him. "You'll have to swing it alone, my lad," he said hoarsely. "Go ahead—keep things moving till you hear from me. Use your own judgment, and act as if you were boss." He blinked, set his teeth hard and turned to Murphy. "Farrington'll give you your orders—"

The ambulance bell clanged at the gate, and Jack ordered Burke to pull his truck out of the way.

BACK at the shack, Jack shivered as he sat down at his desk; at the same time the sweat stood out in beads on his lips and forehead. He was scared, panic-stricken. "Use your own judgment, and act as if you were boss." The words harassed him and made him twist in his chair almost as if he were in bodily pain. What was to be done about raising prices, now that the strike was a certainty? He knew that Mr. Bemis wanted prices increased—but how much? The manager had not said.

Jack rose and paced back and forth across the floor. It seemed a mean and despicable thing to boost prices when your yards were full of coal and more was on the way. Jack had lived in poverty; he knew only too well how the people in Pleasant Street and the vicinity would suffer if the price of coal went up. They would shiver during the coming winter—and winters were hard in the Connecticut valley. Old people and children would die of pneumonia—

He reached for the telephone and called Springer & Welch. Yes, they had increased their prices and intended to increase them more before the end of the week. He called the Thomas Buck Company and heard the same story from them. He found himself with a sudden, unreasoning hatred toward both companies; and he knew there must be thousands of other people in Lambert who would hate them also.

He recalled another quotation from the Bible. "What is a man profited, if he shall gain the whole world and lost his own soul?" That is what they were doing, those other companies. They wanted to fill their pockets, with no thought for humanity or justice—with no thought for their own souls!

With set lips Jack threw himself into his chair, seized pencil and paper and wrote:

*The Valley Company has coal for you
The strike has not changed our prices
We will sell to you at our old prices
as long as the supply lasts*

Then he called to Joe Murphy, and when the man appeared, "Joe," he said, "I want you to answer the phone during the next fifteen minutes. I'm going to put an ad in the papers. I'll get back just as soon as I can." And he hurried forth into the yard and set off toward the gate at a run.

TO BE CONTINUED NEXT WEEK.

LITTLE MISS INGRAM had set out upon a most unusual undertaking, and she needed all her store of patience and courage and imagination for the work in hand.

It began just after she had literally wrested her last promotion from would-be pirating hands, and the official paper had been laid on her desk announcing that thereafter her annual stipend would be twelve hundred dollars. A group of clerks came crowding round to congratulate her. Joy and good wishes and hand shakings and happy blushes were hers. And then, a bit of jealousy found tongue.

"I'm glad you've got it, of course, though I don't approve of the method," declared a severe-faced woman clerk. "Your making your way into the presence of the Secretary by assuming the rôle of a charwoman doesn't strike me as just—er—ladylike, you know, even though there was no other way to get in. I couldn't fancy myself doing such a thing." And she shuddered.

"I presume now," she went on, as Miss Ingram's eyes sparkled at the mention of that visit to the Secretary, "you intend to study law and succeed to the next eighteen-hundred-dollar vacancy?"

But the intended sarcasm fell upon untuned ears, for little Miss Ingram's smile only broadened.

"Maybe I shall!" she laughed. And then, as if the woman's remark had penetrated till it touched a vital spot, she suddenly stopped swinging her feet, stiffened while her face went red and white with the audacity of her thought, and breathlessly gasped: "Why not?"

There was a general laugh at the joke.

But Miss Ingram had not meant to be funny. Indeed, she spent the next ten minutes in serious thought and then rose suddenly from her desk. Her breath came quickly, and there was a bright spot of excitement on either cheek. She slipped quietly from the room and made her way to the Appointment Clerk's office.

"Is there any reason," she asked the Appointment Clerk, as she stood before him, "why a woman should not succeed to a law clerk's desk in the department here, provided, of course, she has the mental qualifications and the spirit and energy to use them?"

The Appointment Clerk had just lunched and was in a mood to be amused.

"My dear young lady!" he replied with a smile. "Such a woman might go as far as she liked!"

"Really? I am in earnest!" She took a step forward. The Appointment Clerk's smile broadened.

"What will you be trying next, Miss Ingram?"

"That very thing," she answered, quickly; "provided there is no departmental rule or usage to the contrary."

"You mean you will study law?" His tilting chair came to a sudden stop.

"I do!"

"How? When?"

"At night! There is a course at the university open for night students. It wouldn't interfere with my work here."

The Appointment Clerk looked for a moment with bright eyes at the excited little woman and then shook his head discouragingly.

"Child, I admire your pluck, but don't let it carry you beyond your strength. I doubt if you could do it. Let the men continue to do men's work."

Her only reply was: "Would I be eligible for the place if I got my degree?"

And after a moment of sharp, appraising scrutiny, he said, slowly: "You would be eligible, Miss Ingram, to take the competitive examination for a law clerkship when a vacancy occurs. You would be pitted against the brightest young lawyers of the office, for such places are keenly sought. And, I say it in all kindness, young lady, you would probably fail."

Miss Ingram's eyes had dulled as he talked; they were staring at the carpet when he finished. Then, suddenly, she threw up her head, determinedly, and her little body straightened with it.

"Then I shall try first, and fail afterward!" she declared, stoutly. And to the accompaniment of his still shaking head she turned and walked swiftly away.

THAT very night Miss Ingram enrolled at the university that was giving an evening law course. And when it became known in the office that she had turned the "joke" into substance and was actually studying law the clerks believed that the

The Noise in the Office

By J. W. MARSHALL

Illustrated by DUDLEY G. SUMMERS



"What you haf not learned in t'ree years you may not hope to learn in a few hours," her professor told her. "Refresh the memory then by ten hours of sleep!"

audacity of little Miss Ingram had at last passed into the ridiculous. Winks and significant noddings were frequent, and suddenly the little clerk became known as "the Judge."

Miss Ingram accepted the badinage and smiled. The enthusiasm of her enterprise possessed her; indeed, it bubbled forth in an excess of good nature. And, as there was nothing to feed the banter, it gradually ceased. There was no amusement in poking fun at a person who wouldn't be galled. So the attention of the mirth-makers became once more taken up with the position of the hands on the clock, and speculation as to whether anyone outside worked half as hard as government clerks, and whether the usual Washington afternoon summer shower would be on hand at 4.30.

Thus forgotten, Miss Ingram studied law. It is true that, as the end of the first year approached she grew thinner, and where the red roses had flamed there now bloomed the white. But the fire still glowed in her eye, her smile was as ready as ever. And then it was over, the examinations were passed, and she had made one "leg" on her three years' pursuit of the degree of LL.B.

Through her second year also she wrestled, and won; and so with the third. And then one morning when the clerks found on their desks the engraved graduation announcements, with Miss Ingram's name high in the list of her class, the office woke up.

"Bully for you! You're a brick!" It was one of the law clerks who first gripped her hand in congratulation, and the big one felt the small one tremble.

Then one of the girls came up, and a dozen others followed her.

"Why, Jennie Ingram! Why, you old—you—Isn't she grand!" The eyes of the fellow woman clerk were moist as she swept the crowding faces. "See now!" proudly. "Look at her. A little bit of a woman, and a great, big lawyer! Jennie Ingram, we're proud of you!"

And then Miss Ingram showed that the human quality was strong in her, in spite of all of her inflexible steadfastness, for she

was dabbing her own eyes with a hastily snatched handkerchief.

"And now what?" The law clerk's bantering voice supplied the diversion. "Must I resign at once to create a vacancy?"

Miss Ingram shook her head laughingly and put away the handkerchief. "Now," she said, "I suppose I shall take the bar examination, and then wait for a chance."

And she did. After a three days' battle with question and answer, she was admitted to the bar. Then she waited, alertly, for opportunity. And it came, as it always does to those who have brain and heart and courage, and who work and watch. An appropriation was passed for another law clerk in her division. Away she hurried to the Appointment Clerk.

"The new law clerkship that Congress has provided?" she asked. "Shall I be designated for the competition?"

The Appointment Clerk tipped back his chair.

"I have finished at law school and passed the bar examination," she added anxiously, in response to his blank look.

For a moment he stared, incredulously, then down came his chair with a bang. He leaned forward and touched a button on his desk. His secretary hurried in.

"You will see to it, if you please," said the Appointment Clerk, and there was a jump in every word, "you will see to it that Miss Ingram's name is added to the list of candidates designated to take the examination for the new law clerkship."

And then he rose and went with her to the door. "It may be unethical in my official capacity to wish you success above others, young lady," he said, bowing low; "but, merely as one of the sex, permit me to hope that you will acquit yourself manfully."

Blushing with pleasureable embarrassment, little Miss Ingram stammered her thanks to his twinkling eyes and went fluttering back to her desk.

Thus, on the date set for the competition Miss Ingram bent her steps down the long corridor to the examination room. As she opened the door and stepped eagerly inside,

a little knot of men, standing at the window in the far corner, ceased their conversation and looked at her curiously. She sat down in the nearest chair. The men's eyes were withdrawn; they looked at each other. One among them whispered, as if imparting information, then the battery of eyes was again trained upon her. She dropped hers and flushed as a titter ran through the group. Then, with a sharply whispered rebuke to the others, one of the men detached himself from the group and stood before her. She raised her eyes a little defiantly.

"I beg your pardon, but they say you're going to be one of us. May I extend the right hand of fellowship?"

INSTINCTIVELY she liked him. He was big, with a powerful set to his shoulders, and strength in his large, clean young face. But above all, the eyes showed a genuine, kindly interest; his smile was as man to man. She rose and as frankly took the outstretched hand. And then, as the examiner entered the room, the young man lingered long enough to wish her a "good luck." Somewhere she had seen those eyes, that smile.

All day long her pen traveled. But there was another day; she would go home and study. As she wearily climbed the steps of her boarding-house her professor at school, passing by, accosted her. He was German, and when she told him her programme he held up an admonishing finger.

"You haf been over the ground in college, young lady. What you haf not learned in t'ree years you may not hope to learn in a few hours. It would be only a frantic groping after what you don't know. See! Refresh the memory then, by ten hours of sleep, so that what you do know may be found ready to mind, without the brain cudgeling, that so takes the strength. I would wish you luck, und—und—schlafe wohl!"

So she "slept well." And next day her nimble brain quickly picked out the facts that were wanted, and her fast-moving pen put them rapidly and steadily down. Even so it was grueling work, and the day was too short. Near her the big young man wrote calmly and assuredly on. He finished when three of her questions were still unanswered and nodded good-by as he passed in his papers. She was still at work on the last when the examiner called for all papers.

"Results will be known in about a week," the examiner said, a little gruffly, as she handed in her papers. "You will be notified."

DURING the first two days of suspense she reviewed the questions and became excitedly hopeful, in spite of the fact that she had not finished the last. Then, on the third day, the new desk was rolled in and made ready for its occupant at the far end of the room. And, rolling in with it, came a most disquieting rumor. It was carried quickly to Miss Ingram by the woman clerk who "didn't approve." She leaned over Miss Ingram's desk, and asked:

"Didn't you know that the Appointment Clerk's son took that examination?"

A quick intelligence leaped into Miss Ingram's eyes. So that was the big young man! It was the resemblance to his father she had vaguely tried to place.

"They say that the examination was a farce," the woman went on.

Miss Ingram flushed. The sincerely expressed good wishes of the father and the impulsive, frank interest of the son flashed before her; she resented the insinuation stoutly.

"I don't believe it!"

"Oh! Don't you?" The woman's thin lip curled. "When you have been in the department as long as I—"

The rest of the sentence was lost to Miss Ingram as the woman turned away and walked back to her desk.

"I don't believe it!" reiterated Miss Ingram to herself as she sank back in her chair. "I can't believe it!"

With dogged persistence she repeated her disbelief to each clerk in turn who mentioned the subject. Even at the assertion that the appointment had already been made she was equally obstinate. And yet, in spite of these declarations of faith, she became woefully depressed. And then, on the night of the fourth day, she dreamed she saw the masterful young man—the son of the Appointment Clerk—walk calmly into the office and seat himself at the desk, as if it were all so ordered from the beginning. And then, every eye in the office turned and looked—at her.

So vivid was the dream that, as she

breathlessly entered the office next morning, she braced herself desperately to face the reality. But the desk was vacant.

"Sh!" It came from a desk close by. Swiftly her eyes swept the room and followed the gaze of a dozen faces toward the Chief's room in the alcove. Then her own face went white, for there, chatting and laughing with the Chief, stood the big young man and his father.

Unsteadily she sought her own desk and sank into her chair. So it was as they had said, after all! The examination was a farce; he was to have the place from the start. Oh, what a fool she had been! Oh,

the hypocrisy of it all! And then, as she sat staring at nothing, her face set in bitterness, the kindly interest in the eyes so much alike again rose before her—the eagerly extended right hand of fellowship, the undeniably warm-hearted wish that she might acquit herself manfully. Suddenly a wave of shame surged through her. Her face flamed. Would such as they nurse suspicion? That was the difference between the truly big and the little—and she was little.

"I can't believe it; I won't believe it, and I don't!" she whispered to herself. "He has won it fairly."

She half rose from her seat, with the

intention of being the first to offer congratulations. They were coming down the aisle, still chatting and laughing. As they reached the desk, she took a step forward. But what! They had passed it—were coming on down the room! In bewilderment she slipped back to her chair. And then suddenly all three of them were at her desk. She saw the Chief smile, the big young man nod and raise his hand as if in salute; and then the Appointment Clerk was speaking.

"This is my son, Miss Ingram. He insisted on being present on what he calls this 'auspicious occasion' to congratulate

the victor. You are the winner by three points."

And then they were all talking and laughing, while she stood in a daze and tried to understand it all. Presently she heard the Chief speaking.

"I will have your things moved up at once, Miss Ingram." He held out a packet of papers tied with red tape, and then half withdrew it. His eyes were twinkling; it was evident that he was about to make a joke, an amusing if not original joke. "And if you please, ah—Judge, will you let me have your opinion on this case as soon as convenient?"

IN the year 1901, the electrical profession having finally grasped the value of the Steinmetz method of alternating-current calculations, and having long recognized his great work with the law of hysteresis, Steinmetz received a high honor. It was his election, in June, as president of the American Institute of Electrical Engineers, the one great national organization of electrical engineers in the United States.

This was only the first of a number of honors which Steinmetz now began to receive. Just a year later, in June, 1902, he stood before Dr. Charles W. Eliot, president of Harvard University, to receive the degree of Master of Arts. As Doctor Eliot handed Steinmetz his diploma, he said to him: "I confer this degree upon you as the foremost electrical engineer in the United States, and therefore the world."

It is interesting to remember here that Steinmetz never received a degree from the University of Breslau, at which he studied. His political activities had made it necessary for him to leave the country to avoid arrest, just as he was about to graduate with the degree of Doctor of Philosophy. It was American colleges that gave him all the degrees he ever received.

A year later, in 1903, Union College, in his home city of Schenectady, conferred upon him the degree which he had expected to receive from Breslau—Doctor of Philosophy. This made him a doctor of learning, and from that time throughout the rest of his life he was known everywhere simply as "Doctor Steinmetz." He now had an opportunity to enter a new and most interesting field of work. He was invited to become a professor on the faculty of Union College.

Up to 1902, Union College did not have a very complete course in electrical engineering. The president of Union at that time, Dr. Andrew Van Vranken Raymond, wanted to see electrical engineering developed into one of the big subjects. He realized how rapid electrical progress in this country had been. He knew that the demand for well-educated electrical engineers was becoming very great. He simply wanted to keep up-to-date by offering students of Union the best possible course in this subject.

The professorship then offered to Doctor Steinmetz he promptly accepted. There is every reason to believe that he considered it a high honor to be elected to this post. It gave him an excellent chance to employ his qualities as a teacher—qualities which he had in rich abundance. For ten years Doctor Steinmetz was an active professor at Union College. In all that time he was very friendly with the students. He supported their athletic teams, joined one of their fraternities and gave Sunday afternoon lectures at the college Y. M. C. A. on his early experience in Germany. These talks were the occasions of the biggest Y. M. C. A. meetings ever held at the college.

He Helps Electrical Systems

He now gave all his time, when not lecturing at the college, to special investigations, made necessary by the growth of electrical systems and the new uses to which electricity was being applied. In such work as this he continued to be of immense use to the electrical profession, and so to the world at large. He set to work at once on the biggest of the problems which electrical engineers were then facing—that of transmission. This was the problem of sending electric currents over long distances without unreasonably high cost, or unreasonably great losses of current in transit. The problem of distribution, or of sending electric current to a large number of places where it was to be used, was connected with the problem of transmission.

Doctor Steinmetz was also working steadily all this time in his investigation of "transient" currents, including his study of lightning. This was simply another part of the same general problem.

The Wonder Story of Steinmetz

By JOHN WINTHROP HAMMOND

Chapter V. HE BECOMES A PROFESSOR AND RECEIVES HONORS



Doctor Steinmetz and little Joe Hayden, one of his adopted grandsons, on the way from the camp to Schenectady. For a long time Doctor Steinmetz used to ride to work on a bicycle

The transmission problem had arisen because the demand for electricity was constantly increasing all over the United States. To take care of this demand it was necessary to send electric current from power houses over miles and miles of country, to towns and cities where it was needed. Especially was this true if the electric current was produced by waterpower, since waterpower

transmitted, at these voltages, over great cables to smaller power houses, known as substations, located in or near the towns and cities. At each substation other transformers lower the voltage from whatever it may be when received to only a few thousand volts.

Then the current, at two or three thousand volts, is distributed to a number of different sections of the city, or to a number of different towns lying near together. The wires that carry it from the substation take it to much smaller transformers, located on electric-light poles at street corners. These small transformers again lower the voltage, this time to 220 or 110 volts. And then the current, at this lower voltage, is carried by smaller wires from the transformers on the poles into houses, stores or offices in the neighborhood, for lighting or for operating electric vacuum-cleaners, electric toasters, electric heaters and many other devices.

The systems today are much larger, more extended, and take in more territory in consequence. They supply many more houses and stores than did those of 1902. They are more complicated, and the voltages are much higher. In one or two systems in California the voltage is as high as 220,000 volts on the great transmission cables—the highest in the world.



Photograph by Courtesy General Electric Co.

Interior of a waterpower generating station at Niagara Falls. Inside each of these ten huge drums is a waterwheel generator with a capacity of 3750 kilowatts equal to 5027 horsepower

stations had to be located close by waterfalls and therefore were usually a long distance from the towns and the cities.

To send increasing volumes of current over increasingly great distances could be done in only one way—by raising the voltages of the currents. They had to be higher voltages than any that had ever been tried before. This raising of the voltages is done by means of the alternating-current transformers. Transformers that do this are located at the power station. They may raise the voltage to 30,000, 50,000 or 100,000 volts, or more. The current is then sent, or

The systems of today are different in one other way. They are being connected together—interconnected, as electrical engineers call it—so that the end of one system is simply the beginning of the next. This is most useful in preventing interruptions of the electric service furnished to customers of the power companies.

But all this was not in existence twenty-five years ago. When Steinmetz became a consulting engineer and began to work on transmission and distribution problems, the highest transmission voltages known were not over 80,000 volts. Indeed, when

Steinmetz first came to America there was scarcely a single transmission system of any length in the entire country. In 1893, the General Electric Company built a line in California which sent electrical energy seven and a half miles, at 2300 volts; and by 1898, shortly before he became a consulting engineer of the company, an eighty-mile line which carried current into Los Angeles at 33,000 volts was considered a remarkable engineering accomplishment.

It also became possible, with multiphase apparatus, to utilize power from distant waterfalls for driving the electric generators and to send the current to places where it could be put to work, no matter how far away they might be from the generating station. The first large multiphase installation was in 1893-4 at Niagara Falls, when generators of 5000 horsepower were used. But for a while even the energy produced at Niagara was sent only a comparatively short distance and at a comparatively low voltage.

As desirable transmission distances increased, the voltage had to be increased likewise, in the interests of economy. And then new problems arose. The size and character of the copper transmission cables became an important matter, as at very high electrical pressures corona losses were encountered. A certain proportion of the electrical energy would leak out from the cable and travel along in the surrounding air in a sort of ring. This is the corona, and it meant that some of the electrical energy which started from the generator had been lost on the way. It would disappear, instead of going into the electrical apparatus at the receiving end, to perform work.

"The Wizard of Schenectady"

Another problem arose as soon as engineers tried to send electric current at higher voltages. In the generating stations where the step-up transformers were located it was noticed that the electrical apparatus of the station was disturbed by voltage leakage from the transformers and conductors.

Doctor Steinmetz began working on these and similar problems with much energy. He helped establish a special training course at the General Electric works, where engineers could study the subject of transmission. An experimental transformer was set up, which operated at 220,000 volts, the first time such a high voltage had ever been tried anywhere. He visited power houses in some of the big cities, like Chicago, where the demand for electricity was growing very fast, and where, consequently, the problems were becoming serious.

Finally Doctor Steinmetz, after a number of years of study, invented an entire system of electric current transmission covering the composition of the conductors and cables, the design of transformers, the use of electrical devices of a protective, or limiting, nature, which would safeguard adjacent station apparatus. Every factor was included. The electrical laws governing the design of all types of electrical equipment were splendidly applied by Steinmetz through mathematical calculations.

He continued to amaze his fellow engineers by his remarkable mathematical ability. He could carry the table of logarithms, one of the most important and complicated tables of higher mathematics, in his mind. He could do difficult problems in his head and could add or multiply enormous sums in the twinkling of an eye.

Because of the tremendously valuable work he was doing, people began to call him the "wizard of Schenectady." Others called him the "little giant." Everyone recognized him as a scientific genius.

Slowly, yet unmistakably, his wonderfully useful life was building itself higher and higher—a tower of splendor for all men to see and feel better for having seen it.

TO BE CONTINUED.

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FACT AND COMMENT

EVERYONE is ready to admit or even to boast that he has a good heart, but no one dares to say as much of his brains.

CLEVER AS WE ARE, the ancient Egyptians did some things better than we. To take a simple instance, they made better nursing bottles. These bottles were made heavy at the bottom to keep them from tipping over when stood on end, and square sided to keep them from rolling.

THE RETIRING PRESIDENT of the American Institute of Architects says that everyone ought to live within walking distance of his business. But if that desirable condition came to pass, should we all really walk to work, or should we get out the car and ride thither in style?

THE PROTEST OF FRANCE

AMERICANS cannot ignore the significance of that dramatic procession of twenty thousand French veterans, led by a host of blind and crippled soldiers in wheelchairs, which marched in perfect order through the streets of Paris and laid a plaque, bearing a dignified appeal from the war veterans of France to the people of America, at the foot of the statue of Washington. Neither from the marchers nor from the thousands who watched them came any disorderly or passionate expression of hostility against the United States. The demonstration could not have been conducted with more restraint and propriety. But it is the more moving on that account.

Rightly or wrongly, the French nation, and particularly the men who bore the burden and suffering of the actual fighting, believe that we have not treated them with generosity or even justice. "After the deceptions of peace," says their protest, "the proposed debt settlement would consummate the ruin of France and the loss of her independence."

Surely no American wishes that. If we were convinced that that would be the result of the arrangement that has been made for discharging the monetary debt that France owes us, we do not believe that anyone would want that arrangement carried out. Even if the French veterans have exaggerated the plight of their country, nevertheless no money that we are likely to receive from France would be worth the loss of our long-standing friendship or the unanimous conviction of the French people that we had taken advantage of their difficulties to extract from them money the loss of which will impoverish them.

Most Americans, we are sure, wish to be not only just but generous to France. But few of us are competent to judge how much France can pay or ought to pay on its war debt to us—or whether indeed it ought to pay anything. That question we have left to the economists and public men whose duty it is to study the situation and act upon it. At the same time we must recognize that it is not simply a question of economics or of commercial credit. Human emotions and human passions are involved. Mutual confidence, good feeling and friendship are involved. We cannot tell what effect the procession of war-marked veterans will have on American public opinion or upon the American politicians and public men. But it ought to set us all thinking. "Imponderables," which the Germans refused to take into account, caused their defeat in the Great War.

There are imponderables in peace time, too. If we in our turn ignore them, what will it mean to us in the end?

WHAT IS EDUCATION?

FOR a month or more everyone who likes birds must have noticed the solicitous care that the robins have been giving to their young. After they have taught them to fly, the old birds keep near them and watch them all day. Whenever you hear their alarm note you can be sure that a cat or a boy or some other dangerous animal is near.

The young robin is an obedient child. He minds father and mother without question or argument, and so he usually escapes the avoidable dangers and grows up to be a prosperous and useful robin, who spends his winters in the South and in time has a large family of his own.

All animals and all primitive peoples educate their young in the same direct, personal and common-sense way. Only the so-called civilized races neglect or delegate it.

The other day a little boy was burned to death through his own ignorance and that of a chum. They were playing in a yard where there was a gasoline pump, and the boy thought it was fun to spray the other from the hose. The next link, and the last, was a spark from a firecracker that one of the boys lighted. Both of those children had parents, and both were going to school. Had either of them received the kind of education to which, even at that age, he was entitled?

In every town and every village you will see groups of boys dodging behind trees and hiding behind clumps of shrubbery, aiming and discharging toy pistols at one another. They are imitating the deeds of bandits or policemen or Indian fighters. You may smile and say there is no real harm in it; but by-and-by, perhaps when he is man-grown, one of those boys will pick up a pistol and point it at some one and pull the trigger, and the papers will record another didn't-know-it-was-loaded tragedy.

Fifty years ago two boys were attracted by the "spiel" of a "barker" for a circus side-show. Inside they would find an object lesson that would last them as long as they lived, and would surely save them much pain, and might save their very lives. They went in. A lone man sat there silently whittling, with long, even strokes from his hand to the end of the stick. He neither spoke nor looked up. One of the boys said, "Where's the show? What's the great object lesson?" "Son," said the man, "if you never whittle toward yourself, you never'll cut yourself."

Ten cents' worth of education, but worth a good many dollars.

THE VALUE OF SWIMMING

WE have never known anyone who did not admit freely that it would be a good thing if everybody knew how to swim. The exercise is delightful and healthful, and the practice of it often enables the swimmer to save his own life or that of others in time of peril. Schools and summer camps encourage it when they do not insist on it, and most parents are glad to have their children learn how to swim.

But Sweden is taking hold of the matter with unusual seriousness. The national government itself has determined to persuade or compel every Swede to be a swimmer. Hereafter no teacher who cannot swim will be employed in the public schools. No boy—and we believe that girls are included too—can be passed in his school examination unless he can pass a swimming test as well. No one who is ignorant of swimming can be appointed to an official position in the public service. All this because about 340 people are drowned every year in Sweden. We have not at hand the figures for our own country, but the loss of life here is probably quite as great in proportion to our population.

For some reason, which we have never seen satisfactorily accounted for, man is the only animal who does not swim instinctively. But he does not usually find it hard to learn. A few lessons will generally be enough if the pupil is in earnest about it, and when the stroke is once learned it is, like the ability to ride a bicycle, never forgotten. Everyone ought to know how to swim. There is an immense amount of pleasure to be got from swimming. Moreover, your own life may sometime depend on your knowledge of the art. And, better than all, you may, on occasion, be able to save the life of some one—perhaps some one dear to you—by simply knowing how to swim.

Don't wait for the government to cajole or coerce you into swimming. Learn now.

THIS BU WORLD

A THREE-TIME CHAMPION

EXCELLENCE in games is not the highest kind of excellence, but it cannot be obtained except through the possession and use of some very valuable traits of mind and character, as well as some very unusual physical gifts. So we congratulate young Mr. Robert T. Jones of Atlanta, who is certainly the best living master of the game of golf, if not the most extraordinary golfer who ever lived. He went over to England the amateur golf champion of the United States, narrowly missed winning the British amateur title, did brilliantly win the British open championship, and within a few days of his return to this country took no less brilliantly the American open title. He holds three of the four great championship titles in the golf world at the same moment—something no one else has ever done before, and that no one else is likely to do again for a long time.

ANOTHER SHIPPING-BOARD UPSET

THE Shipping Board continues to disagree with its executive officials and within itself. Capt. Elmer E. Crowley, who succeeded Admiral Palmer as president of the Emergency Fleet Corporation only a year ago, is now removed, and Gen. A. C. Dalton has taken his place. The change was made by the vote of a divided board and is believed to be owing to a difference within the board over the recent sale of a number of Shipping Board vessels to the Dollar line of San Francisco.

A FRIGHFUL EXPLOSION

THE most shocking disaster that has occurred as the result of an explosion of ammunition, since the blowing up of a ship loaded with shells and powder in Halifax harbor during the war, took place at the navy ammunition depot near Dover, New Jersey, on July 10. A bolt of lightning, which struck a bomb magazine, began the trouble, and the fire which it kindled completed the work of destruction. An immense quantity of powder, TNT, armor-piercing shells and other projectiles went up in a succession of tremendous explosions. The depot was completely wiped out, and a very great amount of damage was done to houses and villages even several miles from the scene of the explosion. It is believed that at least twenty persons were killed, with something like ninety-two million dollars' worth of property loss and damage.

CANADA'S POLITICAL CAMPAIGN

UNUSUAL issues are presented to be decided in the approaching parliamentary election in Canada. They were raised when the Governor-General, Lord Byng, declined to dissolve Parliament, although the Premier, Mr. Mackenzie King, had advised him to do so. Mr. Meighan, who formed a ministry in answer to Lord Byng's request, was no more able to command a majority in Parliament than Mr. Mackenzie King had been: so dissolution and a general election had to be ordered after all. The Liberals under Mr. Mackenzie King are making Lord Byng's conduct one of the issues of the campaign; they believe he overstepped his powers in overruling the Premier's advice and appear as the national party of Canada, in protest against any control of the country's politics by the representative of the Crown. The Conservatives, under Mr. Meighan, approve Lord Byng's act and stand for the sentiment in Canada which is in favor of stronger bonds between the different organs of the British Empire. For several years the presence of a third party—the Progressives—has made it impossible for any party to command a real majority at Ottawa, but the new election with its clear-cut issues may put one or other of the leading groups into actual power. In any event it will be momentous for its effect on the future of Canada as a partner in the British Empire.

ENGLAND'S COAL BILL PASSES

PARLIAMENT has passed the bill permitting the eight-hour day in the British coal mines, not without some lively and rather disorderly protests from the Labor

members. The strike still goes on, however, and the government has shown no determination to take the bull squarely by the horns and make a really comprehensive settlement of the chaotic condition in the coal industry. The eight-hour bill, even if the workers were submissive to it, would not cure the sick coal trade, and, with the Labor party in open defiance of it, it can hardly be of much service even as a palliative. The strike drags on, though there are continual reports that a settlement is at hand.

RADIO RUNNING WILD

CONGRESS adjourned without passing the radio-control bill which the Administration recommended; and now the Department of Justice has ruled that the Department of Commerce is without the power to oblige radio-broadcasting stations to comply with its regulations and restrictions. In strict fact, therefore, there is nothing to prevent broadcasters from using any wave length they please, and causing an extraordinary amount of confusion and interference "on the air." In practice, however, the established stations will doubtless keep to the wave lengths assigned to them by the Department of Commerce, and it is hoped that new stations will be governed by a sense of fair play, to their rivals and the public, so that a sort of voluntary regulation will exist. Congress ought, nevertheless, to lose no time in passing a sensible radio-control bill at the next session.

WHAT FRANCE WILL PAY BRITAIN

CAILLAUX and Mr. Churchill have negotiated an agreement concerning the debt France owes Great Britain by which France is to begin with a payment of about \$20,000,000. That amount will gradually be increased until a sum of about \$70,000,000 is reached. The payments are to continue for sixty-two years. The agreement permits France to demand a revision of the terms of settlement if Germany fails to keep up with its reparation obligations. That is the condition which the French wanted to add to the plan for settling their debt to the United States; but the American negotiators would not consent to it.

A ROUND-THE-WORLD RECORD

TWO Americans, Edward Evans and Linton Wells have succeeded in circling the globe in twenty-eight days, twelve hours—almost exactly the time the moon takes to revolve about the earth. The previous record was something more than thirty-five days. Messrs. Evans and Wells succeeded in breaking the record by using airplanes wherever it was possible to do so.

MISCELLANY

THE RHEUMATIC CHILD

WE chose this title, rather than "Treatment of Rheumatism in the Child," because the disease itself calls for treatment with drugs mainly, which is not a proper subject of discussion in a nonmedical magazine, while the treatment of the child who is subject to rheumatism is chiefly hygienic and dietetic. The disease is not very common in children under five years of age, but between that age and fifteen it is greatly to be dreaded. The first attack is seldom very painful or serious, but it is likely to be followed by others, and then there is danger of damage to the heart.

For this reason the first attack is to be taken as a warning that a predisposition to the disease exists, and that everything possible must be done to ward off another visitation. A child with the rheumatic tendency must be protected against exposure to extreme cold and damp. Woolen underwear, including stockings, good stout shoes to keep the feet warm and dry, and confinement to the house on stormy or cold, blustery days are of supreme importance. The house should be kept warm, and the playground or nursery should have a southern exposure, to insure sunlight through the winter months.

When the weather permits, the windows should be opened during the hours of sunshine, for the health-giving rays cannot pass through glass. The child should be examined every six months at least, in order that any existing foci of disease in nose, mouth or throat may be detected early and removed as completely as possible. An antiseptic mouth wash, gargle and nose spray should be used morning and evening, and the bowels should function normally.

Attention to diet is important. During an attack only milk, butter, cream or cottage cheese, toast, zwieback and cereals should be given, but after convalescence eggs and meat in great moderation—that is to say, at one meal only two or three times a week—may be added. The child should drink plenty of water and milk both during and after an attack; lemonade and orange juice are excellent drinks. The use of candy and of sugar in any form should be greatly restricted. In short, everything must be done to build up the health of the child and maintain it at the highest possible level, at the same time avoiding any coddling. Play in the open air should be encouraged whenever the weather permits.

BLUEBERRIES

*I'm sorry, blueberries, that I must leave you;
Vacation comrades of a summer hour,
Gay little children of the upland pastures,
Lovely as any flower!*

*I met you on a ramble that first morning,
Inside the pasture bars,
Your blue frocks and blue jackets trim and
dainty,
Your eyes like stars.*

*Such pleasures as that pasture held abun-
dant—
Sweetfern, shy paths, roses, a veery's nest!
But blueberries that lay beyond the balsams—
Of all the treasures you were first and best!*

*You did not fear me when I took you from it,
But tumbled from your places in a trice;
And when I ate you—like some greedy ogre—
Still others ripened for the sacrifice.*

*Good-by, blue sky, blue hills, blue-spattered
pasture,
Good-by to you, blue everlasting seal
The city calls. Should I be late next summer,
Blueberry bushes, watch and wait for me!*
—FRANCES CROSBY HAMLET

OCCULTISM IN THIBET

IN Thibet, that strange country in the heart of Asia, where a peculiar form of Buddhist theocracy exists, the people are exceedingly superstitious, and all sorts of curious ideas about "possession" by invisible powers, good or evil,—survive.

Mrs. Alexandra David-Neel, who visited Thibet, disguised as a Nepalese pilgrim, describes in Asia a singular incident of the kind which she witnessed.

I had not finished, however, with the comedies and melodramas acted out by our neighbors in the wretched hostelry, she writes; for I was awakened a night or two after my return by an old woman, one of the open-air lodgers, calling for help in behalf of her daughter. Yongden, the captain, his wife and I all ran outside. The girl was sitting up and was breathing with difficulty. She emitted strange sounds like the noise of an engine letting off steam.

"I understand now," said the mother. "The god rides her." The girl, it seems, was a pamo, or medium.

The mother and sister hastened to fasten on her the symbolic ornaments of the pamo, including the hat with five Buddha images, and soon she began to rock her head and to dance. Then her chanting rose to a shrill scream.

There were two dogs chained in the courtyard. These beasts, not enjoying the performance, began to bark and howl, and one of them succeeded in breaking its chain and jumping toward the pamo. Several of us went after it, pulled it back and tied it up again. Suddenly Yongden noticed that the dog had something in its mouth. It was the pamo's hat, which had fallen off in the confusion.

The pamo had stopped her dance and stood stiff and motionless. When her mother asked her if she had been hurt, she seemed unconscious and did not answer. Then the old woman noticed for the first time that the hat was missing.

"Where is my daughter's hat?" she lamented. "Where has it fallen? Oh, what a bad omen!"

"The dog has it," I said. "Do not be so sorry; it was an old one. The lama, my son, knows a kind trader in the town, from whom he will beg a new one."

I thought that the old beggar would be consoled with this promise, but she began

to scream: "Take it away from the dog. It is the god. The god is in it. The dog will kill the god, and my daughter will die."

"Has the dog really got it?" inquired the captain.

"Yes," answered Yongden.

"Then the pamo will die if he tears it," solemnly pronounced the oracle.

It was not the time to reason. All the guests of our caravanserai had come upon the scene, and not one questioned the perilous situation of the god and of his medium. On the other hand, none dared affront the terrible black animal, the only sensible-looking creature present, which considered the nocturnal agitation with utmost astonishment, completely forgetting even to play with the pamo's miraculous head-gear.

"A magic dagger is needed," said one disheveled orator, explaining how it could be used by a duly initiated lama to overpower the demon that had entered the dog in order to seize the ritual hat and devour the vital principles residing therein. No magic dagger was available, but the captain cut short the discourse by saying, "I will fetch my sword and stab the animal from behind."

I felt indignant at the idea of killing an innocent dog. "Let me get the hat," I said. Turning to Yongden, I ordered him to make a big ball of tsamba, or barley meal. While he ran into the house, I approached the dog. It got up when I spoke to it. Patting its head, I quickly gave a kick to the witch's crown and sent it flying some distance. Then, as Yongden came out with the ball of flour, I said: "Eat that, my friend. It will be more tasty and nourishing than a god."

The mother immediately replaced the dirty hat on the head of her daughter, and the latter, curiously recovering from her insensibility, spun round like a top. "The god has come back," shouted the ragged audience, and everybody began to tell strange stories.

"CHURCH-GRIMS" AND WHITE MAGIC

NOT long ago The Companion published a little article on modern witchcraft, giving some curious instances of the persistent nature of the belief in witches and witch-cats. "Further Reminiscences," the new autobiographical volume by the Rev. S. Baring-Gould, supplies numerous interesting additions to the number of kindred authenticated superstitions.

When he was a young clergyman in Devonshire several of the parishes in the neighborhood, as also his own, were supposed to be haunted by ghostly animals, called "church-grims."

"Marystow possesses a black dog that haunts the church-yard. Coryton a white calf," he relates; "another church, which I will not name for fear of giving offense, has a ghostly ass. There the churchwarden, a jovial but sharp-tongued farmer, was wont to say: 'The volk der talk o' a black hass as is seen in and about the church at night. I dun know much about that, but I ha' seed'n and ha' heard'n bray scores and scores o' times. He frequents the pulpit! Our church-grim is a white pig, or, as some say, two white pigs yoked together with a silver chain.'"

THE BEST MOTION PICTURES

Editor's Note: There are so many motion pictures; how can any family tell which are really worth seeing? The following list, revised every week, contains the pictures which The Youth's Companion recommends to you, as clean and interesting. We cannot express any opinion about other pictures which are shown on the same programme.

THE YOUTH'S COMPANION BLUE-RIBBON LIST

The Sap—Warner Brothers.
His buddy's faith converts a coward and a sham into a hero. Kenneth Harlan.

Bigger Than Barnum's—Film Booking Office.
Circus life, and its code of courage and conduct, well rendered by Viola Dana and George O'Hara.

Early to Wed—William Fox.
A newly-wed family learn the folly of splurging and sham. Katherine Perry and Matt Moore.

The Devil Horse—Pathé.
Rex, the equine star, in a lively story of frontier life and animal devotion.

Ben Hur—Metro-Goldwyn-Mayer.
Gen. Lew Wallace's classic story. The naval battle and chariot race are thrilling. Ramon Navarro.

The Vanishing American—Paramount.
The Indian's tragic destiny romantically portrayed by Richard Dix.



The Telephone and the Farm

THERE was not a farmer in the world fifty years ago who could talk even to his nearest neighbor by telephone. Not one who could telephone to the doctor in case of sickness or accident. Not one who could telephone for the weather report or call the city for the latest quotations on his crops. Not one who could sell what he raised or buy what he needed by telephone. A neighborly chat over the wire was an impossibility for the farmer's wife or children.

In this country the telephone has transformed the life of the farm.

It has banished the loneliness which in the past so discouraged

the rural population and drove many from the large and solitary areas of farms and ranches.

It is a farm hand who stays on the job and is ready to work twenty-four hours every day.

The telephone has become the farmer's watchman in times of emergency.

It outruns the fastest forest or prairie fires and warns of their approach. It has saved rural communities from untold loss of lives and property by giving ample notice of devastating floods. Three million telephones are now in service on the farms, ranches and plantations of the United States.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY AND ASSOCIATED COMPANIES

BELL



SYSTEM

IN ITS SEMI-CENTENNIAL YEAR THE BELL SYSTEM LOOKS FORWARD TO CONTINUED PROGRESS IN TELEPHONE COMMUNICATION

Learn to Drum! Free Lessons!

With every Ludwig Trap Drum outfit we furnish big, free instruction course. These easy lessons enable you to play in a short time.
Go to any music dealer or write us direct for full details.
Ludwig & Ludwig
1611 N. Lincoln St., Chicago 11.

Avoid Imitations Safe Milk

ASH for Horlick's
The ORIGINAL
Malted Milk
and Food
For INFANTS,
Children, Invalids,
Nursing Mothers, etc.



RANGER DELIVERED FREE

on approval and 30 days' trial, express prepaid. Many styles. Bicycles \$21.50 up. Easy payments. Write today for our big catalog and Factory-to-Rider prices.
MEAD Cycle Co., Dept. C-51 CHICAGO

AT FACTORY PRICE The New Companion Sewing Machine is guaranteed for 25 years, sold to Companion readers at a very low price, and delivered free anywhere in U. S.
Write for Free Booklet and Trial Offer
THE YOUTH'S COMPANION, Boston, Mass.

1 Hour Each Evening 10 Evenings

A little practice, and you will be sitting on top of the world with your

BUESCHER True Tone Saxophone

Only with simplified, easy fingering, easy blowing Buescher Saxophone can you do this. Lessons given with new instrument. Teach yourself. You can do it. Get the facts. Send postal today for beautiful literature and details of home trial and easy payment plans.
**Buescher Band Instrument Co. (8)
1778 Buescher Block Elkhart, Ind.**

ALWAYS HAVE DRY MATCHES

Marble's Water-Proof Match Box keeps matches dry, holds enough for several days, absolutely waterproof. Made of seamless brass, size of 10 gauge shell.
Get at your dealers or sent by mail, postpaid. Write for catalog of Marble's Sixty Specialties for Sportsmen.
**MARBLE ARMS & MFG. CO.
623 Delta Avenue Gladstone, Michigan**

Teach Children To Use Cuticura

Soothes and Heals
Rashes and Irritations
Cuticura Soap Keeps the Skin Clear

37th Weekly \$5 Award

MANY extremely well-made articles of furniture are spoiled by the lack of a proper finish. Everyone admires a beautifully finished piece of work. What is more disappointing than to see an excellent piece of carpentry ruined by a poor finishing job? Member Andrew Robards, Jr. (16), of Stilesville, Ind., has paid attention to the final stages of construction and has produced a davenport table and an end table which are excellently designed and constructed from start to finish.

Note the care with which Member Robards finished his furniture, as evidenced by his description. He says: "They are both made from cherry. The top of the davenport table is 52" long, 19½" wide and 1" thick. It stands 30"



high. The legs are 1½" thick, with bases 2" thick, and the drawer front is 18" x 31". The brace at the bottom of the legs is 1" thick and is cut in a fancy design. The end table is the same height as the davenport table. Its top is in the shape of a semicircle, the flat side of which is 2' long, and the width at the largest point is 1'; it is also 1" thick. The legs are 1½" square at the top and taper at the middle to 1" square. They are both stained mahogany, and after giving them four coats of shellac and two of varnish, rubbing down with worn-out sandpaper after each coat of shellac and with pumice stone after each coat of varnish, they were waxed and polished."

Special Cash Award

THE circular saw made from an old sewing-machine which Member Roger Perkins (14) of Johnson, Vt., submitted to the Y. C. Lab was not his original project. His first contribution did not quite measure up to our standards, and he was notified that to gain Associate Membership he must submit some other project. Member Perkins was not discouraged and sent to us evidence of his ability in the photograph and description of his sewing-machine saw. He is given a Special Award for the spirit he has shown in submitting a second project and for his ability in constructing a useful machine.



The Secretary's Notes

AT the present time we have Applicants or Members in every state of the Union, in Porto Rico, England, Canada, the Philippine Islands, Mexico, Hawaii and China.

By increasing our membership we can materially increase the benefits which may be derived from the Society. You can help in two ways: keep in touch with us in regard to your latest projects, and interest your friends in the Y. C. Lab.

We shall do our share at headquarters by publishing interesting worth-while projects and by providing a staff of experts to answer your questions. When asking for information from the Councilors, inclose a two-cent stamp for reply. No charge is made for their services.

All projects received are considered in the granting of awards. To receive the Weekly or Special Awards, your project must be interesting, well-made, clearly described, and accompanied by a sketch or photograph. Of course a photograph is desirable. Have your own picture taken with your project.

Membership Coupon

To join the Y. C. Lab, as an Associate Member, use the coupon below, which will bring you full particulars concerning the Society. If elected, you will have the right to ask any question concerning mechanics, engineering, wood and metal working, radio, and so forth. You will also become eligible to compete for the Weekly, Quarterly and Annual Awards made by the Society, and you will receive its button and ribbon. There are no fees or dues.

The Director, Y. C. Lab
8 Arlington Street, Boston, Mass.

I am a boy years of age, and am interested in creative and constructive work. Send me full particulars and an application blank on which I may submit my name for Associate Membership in the Y. C. Lab.

Name

Address



To secure this Membership Button, the first step is to use the coupon below

THE Y. C. LAB

The National Society for Ingenious Boys

Y. C. Lab Project No. 44



This seal on manufactured products certifies tests made by the Y. C. Lab

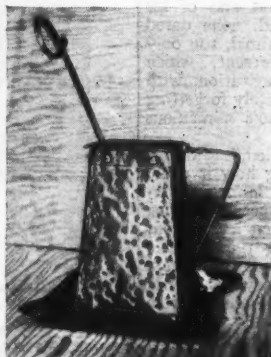
THIS picturesque little product of New England adds a nice touch to the open fireplace and enables you to start a fire safely, without paper, and with a great economy in kindling wood. It can be made from sheet copper or sheet brass, while the rod which holds the fire brick is square rod, either ¼" or ½". The lighter we made is hand-hammered, square, and slightly tapered to the top.

Materials necessary: Sheet brass, 25 B. & S. gauge—a piece 12" wide and 30" long ought to do; a piece of square brass rod, ¼" or ½", and 18" long; a few split rivets and some solder for putting the thing together.

The fire ball is made of stove-lining cement or clay. Simple tools only are needed: ball hammer, metal snips and drill.

Make a wooden chuck 6½" high, having a 3" square top and a 4" square bottom. This makes a very handy form upon which to drill and fit. Make a paper pattern first by placing the chuck in the middle of it and marking the sides off so as to get the proper angles. Enough extra should be left at either end to make a lap which will be the back of the lighter. Cut out and form up on the chuck, putting in four rivets. Hammer in the round dents with a ball hammer. Cut out two strips for the top and bottom border ¼" wide and rivet, using two rivets to a side. These strips must be cut with the same angles as the larger piece; they can be marked off from the paper pattern used before.

The handle is 1" wide, but rolled or folded over, and so it is cut 1½" wide and 10" long. Rivet this at top and bottom of



The Cape Cod Fire-Lighter

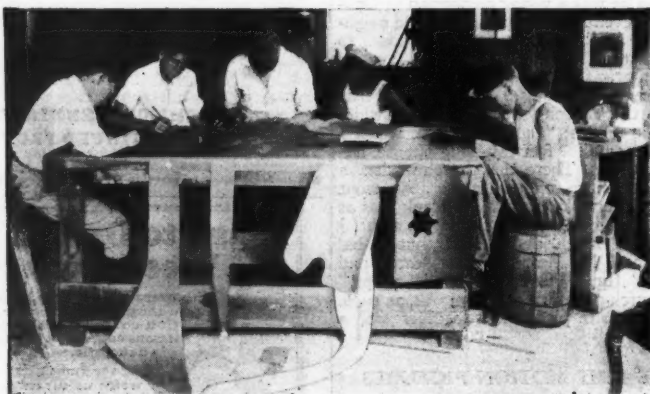
with the ball hammer as before.

The rod is annealed by heating it a cherry red over a blaze. The loop can then be made and the whole thing hammered to match the lighter and tray. Make a flat-bottomed cone out of heavy paper and secure it to a piece of wood. Drill down the center so that the rod can stick up straight in the board. Mix up some stove-lining cement with water and pour into the mould. When this dries it makes a fire brick which will soak up enough kerosene to light a fire.

Of course the lighter has to be kerosene leak-proof; so cut a piece of the metal enough larger than the bottom to make a small lap. Solder this to the bottom, making it leak-proof. Also solder the inside of the lighter where the back is lapped.

Blue prints prepared by the Y. C. Lab Members of Wollaston will be mailed to you for 10 cents.

HARRY IRVING SHUMWAY
Councilor Y. C. Lab



THE Wollaston Y. C. Lab staff are busily engaged in cutting patterns for Cinderella. As announced in Y. C. Lab Bulletin No. 2, these patterns are available to Members, Associate Members and Applicants upon the payment of a deposit of \$1.00. Upon the return of the patterns within three months the dollar is refunded. To all others not directly connected with the Lab the cost is \$3.50. Cutting an original set of patterns for Cinderella is quite a long and exacting job. In order to facilitate the construction of the many Cinderellas which are about to be built, the Y. C. Lab No. 1 is

making facsimile copies of the original patterns. In front of the table from left to right are the patterns for radiator shell top, torpedo rib and wheel disk. The boys from left to right are Members Stanley Call, Robert MacDonald, Horace Call, Herbert Sawyer and Clifford O'Connell.

Y. C. Lab Bulletin No. 2 gives complete directions for constructing Cinderella. This Bulletin is available to our Members, Associate Members and Applicants at a cost of 45 cents. To all persons ineligible for membership the cost is \$1.00.

Questions and Answers

Q.—What are the sails of Chinese junks made of and how could I make one for a model? What is meant by penny nails, as three-penny nails or nine-penny nails? Associate Member Bertie G. Walpole, R. R. No. 3, Paisley, Ont., Canada.

A.—by Councilor Magoun: Greetings across the border! Your question about sails for a Chinese junk almost stuck me. Almost! They use split bamboo with a "lug sail" rig. I suppose that when they want to reef sail they just roll it up the way I do the split bamboo sun screen on my front porch. Get some split bamboo and hold the pieces together by weaving threads in

and out, like a rush-bottom chair arrangement. You'll have a job!

Now for the nails. When I was a small boy I used to think that a ten-penny nail meant "ten for a cent." That isn't as foolish as the hardware man would like to make you believe, because, although it is now used only to denote a certain arbitrary size, in the fifteenth century (about the time of Columbus) a ten-penny nail meant that you could buy 100 for ten pence. Perhaps some old-timer will try to tell you that a ten-penny nail used to mean ten to the pound, but this is wrong. Probably he can't remember back to the fifteenth century, anyway.

Special Cash Award

JOHN SLY (9) of Flushing, N. Y., is one of our youngest members. On March 1 Member Sly wrote to the Director, stating his desire to become affiliated with the Y. C. Lab, but at that time he had not constructed anything which he considered of sufficient importance to gain him Associate Membership. His application was kept on file, and on June 1 we received a description and photograph of his project.

Member Sly's sand box is neatly constructed. For a first venture in carpentry his workman-



ship is so good that the Director and Governors have decided that he should have a Special Cash Award. Member Sly is on the right.

Proceedings
Of Y. C. Experimental Lab
at Wollaston, Mass.

June 19.

Member Sawyer began to build a Cape Cod fire-lighter in hammered copper. This makes an admirable little project, and no doubt many readers will enjoy making them for their homes. Member Call finished his job on our Buick.

June 21.

Still on the Cape Cod fire-lighter. Began building a sun dial from plans by Mr. R. S. Trulock, 230 W. 28th St., Oklahoma City, Okla. A new recruit to our forces, Robert MacDonald, made the top. Members Call and O'Connell went out into the hot sun and dug the foundation (two feet deep), made a box and filled it with rocks. Then we all took a hand in the cement work. We certainly love to do cement work in our Lab. Note: We do it rather well, too.

June 22.

Made a column for the sun dial out of an ornamental piazza post, which we bought secondhand from the lumber yard.

June 24.

Started two new projects: a big printing frame, which we shall use for blueprints, and an extra large Cape Cod windmill.

June 25.

All four projects going at once now; everybody busy. Figured out the diagram for the sun-dial top and designed the gnomon. This sounds like something spooky, but it is only the triangle that casts the shadow.

June 26.

Put a second coat of ivory lacquer on the dial, and Member Sawyer started painting and lettering the design. He finished it in time to test it in the sun. It keeps quite good time.

June 28.

Sun dial still keeping good time. Another ornament for the Lab garden. But wait till we get out our big windmill. Made the tray for the Cape Cod fire-lighter, and also the fire brick for it out of stove-lining cement.

June 29.

Began to cut out duplicate patterns of Cinderella. These will be loaned to Y. C. Lab Associates and Members, as described in Y. C. Lab Bulletin No. 2, which is nearly ready for them at 45 cents a copy. To people not eligible to apply for membership, the patterns will be \$3.50 a set, and the book \$1.00 a copy.

July 2.

Made blueprints of the fire-lighter. Can supply them for 10 cents. Still cutting patterns for Cinderella; they are marked out from the master patterns on thin, tough craft paper.

July 3.

Began work on a new water scooter, hydroplane type. It is to be 40 inches long. We also started a model speed boat, also 40 inches long. With all these things done and tested, which take time, we will have some extra good Lab projects for all boys to make next autumn and winter. That sounds far ahead; but the business of this Lab is to take all projects out of the theoretical class and arrange them so they can be made at least possible expense and with a maximum of efficiency. We don't publish plans and designs until the object itself has been made—and works!

July 6.

Tried copper-plating. Set up an outfit in a crock and used an ordinary storage battery for current. This works very well. Report later.

HARRY IRVING SHUMWAY
Councilor Y. C. Lab

Five Home Runs

Each of These Fellows Played the Game Hard All Summer, and Came Home a Winner



"NOW I KNOW SOMETHING ABOUT DAD'S BUSINESS"

By Ronald E. Wood, Sweetwater, Tenn.

LAST summer I worked at the Howard barytes mine, of which my father is the superintendent. I worked, with four other boys, on the "picker belt." Our duty was to separate the false rock from the good ore (barytes) as it passed us on a large conveyor belt.

The raw material is dug with a steam shovel and is transported to the "washer" by two "dinky engines," one run by steam and the other by gas. It is dumped into a crusher, through which it passes into the "logs," which cause it to come into the elevators gradually, instead of coming in a body. It is then elevated into a screen, which separates the coarse from the fine.

One has to be quick and always on the alert and must have pretty good eyes to discern the faulty rocks. Of course after a few weeks' work one can tell easily.

It is not hard work, but it is tedious, and the noise is very trying.

Here is a table of my earnings, at twenty cents per hour:

June to September	
June.....	\$50.00
July.....	49.00
August.....	48.00
September.....	48.00
Total.....	\$195.00
Earned on Saturdays from	
Sept. to Jan. 1.....	50.00
Total.....	\$245.00

"I BOUGHT THE SEEDS AND FOUGHT THE WEEDS"

By Weldon Sadler, El Paso, Texas



LAST summer I decided that I wanted some money. After a day or two I decided that gardening would be a good way. There was a plot of ground about thirty-five by twenty feet adjoining our house, so I decided that this would be a good situation for my garden. I took a spade and spaded up the entire garden. This took me almost an entire

week, and at the end of this time I had my seeds all ready to plant. I had lettuce, radishes, onions, squash, beans, turnips and pumpkins. I laid off the ground in rows, and planted the seeds, and watered the garden thoroughly. In about two weeks I was greatly pleased to see a few little green shoots in the garden. I carefully watered them, but as they grew what was my surprise to find that instead of onions, as I had fondly hoped, they were weeds! I immediately cut them down, but in a few days many more came. I had a time hoeing, but I finally subdued the weeds and was rewarded by seeing several rows of vegetables start growing. In a few weeks, all my vegetables came up. I was very careful and watered them constantly. Soon they attained a respectable size, when one day I came home and found the chickens scratching up my plants! I drove them out, but they had scratched up and eaten all of my lettuce. I planted the vacant rows with watermelons. When the plants had matured a friend and I marketed them. I got our car, and we put several baskets of vegetables in it and started out. We sold all we had that morning and got orders for more.

After giving my friend his commission for helping me, I had \$16.50 left over. The seeds cost only \$9.50 in all; so I made quite a

profit. Taken as a whole, gardening is very attractive.

"ICE CREAM! ICE CREAM!"

By William Mahey (14), Dunkirk, N. Y.



WOULD like to tell other fellows of a money-making plan which I consider a very good one.

Last summer, at the county fair, I obtained a job in an ice-cream sandwich stand. My boss was a man who had made a business of selling ice-cream sandwiches at fairs for twelve years.

Though my pay was only three dollars a day, I received much useful information which may come in handy to me.

The stand itself was comparatively small, being six feet long, three feet wide and six or seven feet high. I think that any boy could have made the stand at a cost of a dollar or two. The privilege of placing the stand cost ten dollars.

The price of ice cream, wholesale, was thirty-five cents a brick. (The price may differ.) We bought the wafers from a local dealer and cut each brick of ice cream into seven or eight good-sized sandwiches. This left a profit of about twenty-five cents on each brick. Led by my more experienced boss, we did a rushing business nearly every day. On the main day of the fair we paid a hundred and twenty-three dollars for ice cream. This, of course, left a very fine profit. I credit these remarkable sales to the following things:

1. We were always as neat as possible.
2. When business became dull, we both turned "barkers."
3. We always made it a point to give just as good measure as the other fellow, or a little better.

If any of you fellows would like to ask any questions about this business, I would be glad to answer them as far as I am able.

"I MADE JOBS—THEN GRABBED THEM"

By Willard Luce (10), Baytong Beach, Fla.



I WANTED money, and this is how I made it. In June I started selling papers. They sold well, and I sold until school started in September. I made more than \$50.

I wrote a story and won a prize of \$1.50.

I mowed lawns, cleaned up yards and ran errands for the neighbors. I

earned \$2 by doing these three things. I passed out handbills, which amounted to \$6.

I made trellises for flowers. I earned \$1. We had seven hens, and I helped care for them. I sold some eggs, which came to \$5.

I put most of my money in the bank and bought books with the rest.

I have my own bank account.

"THE GAUCH EXPRESS CO."

By Hugh Gauch (10), West Manchester, O.

I STAY at my father's hardware store after school. Sometimes some old-like lady comes in and gets something she can't carry; so I put it in my wagon and haul it home for her. Most times what they give me amounts to anywhere from ten cents to a quarter. Thus in a month I make about three or four dollars. It is great fun and non-tiring.

BOYS AND GIRLS!

We are glad to pay at our regular rates, for interesting and original articles 500-1000 words in length, by boys—and girls too!—on money-making in spare time.

Who's next?



Buy separately
or in assortments

Sir Thomas, Jr.

Everyone admires the fighting spirit of Sir Thomas Lipton—his repeated attempts to "lift the cup" so long held in America. How about you? Do you like to sail boats? Or make ship models? Here are wood-working jobs that challenge the skill and accuracy of the amateur craftsman.

There's no use in starting with a few poor tools. They must be good tools if you are to do a really good job. Therefore, your first step, unless you already have plenty of fine tools, is to get a set of Stanley Tools. Why? Because Stanley Planes and other Stanley Tools are the first choice of experienced carpenters. And Stanley Tools are used in most manual training classes.



You can buy Stanley Tools separately and gradually accumulate your own set. And there are sets of Stanley Tools all ready for you—in sturdy oak chests with various assortments of tools from \$15 up. Or there are assortments of the same Stanley Tools in strong cardboard boxes with simple directions from which you can make your own chest—as low as \$5. Whether you buy a chest or make your own—be sure to keep your tools in a chest where they are safe and handy. Take care of Stanley Tools and they will last for years.



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Ask your hardware dealer



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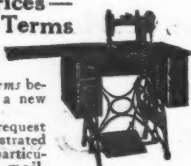
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Drop Head, Style 3

THE YOUTH'S COMPANION
8 Arlington Street Boston



A party dress easy to copy

Dearest Adelaide: The first thing that attracted me to this was the neckline—isn't it a treat! after all the popular-but-plain round and V ones? The petal trimming gives it loads of originality and charm of its own. The petals are carried out in the trimmings on either side of the skirt, too. The material is georgette, made with a bodice top, a very full scalloped skirt, and finished by a narrow shaded ribbon girdle with a flower to match the dress.



The shawl—
worn as an
evening wrap

Then here is the shawl again that Hazel Grey showed us last week—one of the important summer accessories. I think this is the best way to use one as a summer evening wrap—just fold it in a triangular shape and wear it naturally over your shoulders.

Clothes from
Fileen's

Photographs
Hoyla
Studio

From Girl to Girl

TIME IS FLYING

THERE are just exactly twenty more days before midnight on August 31 catches up with us and puts an end to the Fashion Fête. Three of these are Sundays; so that means seventeen sewing days, or less than three weeks! Is your dress started? Well along? Finished? Have you sent me a picture of yourself wearing it, with the blank that tells about the materials you used in making it, and a sketch or diagram that shows just how you made it? It isn't too late to send for rules and an entry blank and start in even now, but the minutes are beginning to be worth their weight in gold.

Hazel Grey

8 Arlington Street

Boston, Massachusetts

It is fifty-four inches square and has a fourteen-inch silk fringe border; so you can imagine how well it fills the bill as a wrap when worn in this way!

A necklace for the finishing touch is made of oval pearls with a sterling back pearl clasp: How I wish pictures could show colors, for this reflected the lovely pink lights of the dress; and then the shawl is a soft shade of green and looked very sweet contrasted with the pink of the dress.

Now, before you envy me too much for being able to have these exquisite new things all at once, I'll confess that you're looking at Cinderella, for I wore them only because my fairy godmother told me that I could wear them for this picture. Perhaps some of the Fashion Fête contestants will copy some of the dainty new ideas about this dress—I think they should win a prize if they do!

Have you been reading any interesting books this summer? I found a very charming collection of short stories by Walter de la Mare called "Broomsticks" when I went into the Public Library here the other afternoon. It is beautifully illustrated with woodcuts and a delightful book to take along as a companion for an afternoon of leisure in the woods or in a canoe. Do write soon and tell me all about yourself.

Lovingly,

Adelaide

Decorative Uses for Italian Block-Print Paper

DEAR HAZEL GREY: The other day when you were in the studio you liked a little shade that I had made out of Italian block-print paper. You wanted to know how it was done. I shall try to tell you, though it is easier to make one than to describe the process.

For your first shade, I suggest using a plain wire frame of the following dimensions: Four and three quarters inches across the top; eight inches across the bottom; five and a half inches deep. You will find this shade about the right size to use on a desk or a bedside lamp.

Take two sheets of Italian block-print paper, which costs twenty-five or thirty cents a sheet. From these cut off the white border, and rule a straight line along the edge of the paper lengthwise to even it, and also rule strips six inches deep. Mark the paper at the top and bottom of the six-inch strips with dots one inch apart, and rule these lightly and carefully for pleating. There should be about fifty pleats for this shade. After the strips are pleated, join them together at the indented part of the pleat with a little paste.

To trim, cut a strip of gold or silver paper or some contrasting color, three quarters of an inch wide for the bottom band of trimming, and one half inch wide for the top. Fold the strip lengthwise, which makes a long crease for a guide when pasting on to the shade, as half goes on the inside of the shade and half on the outside. This band besides having a decorative quality gives strength to the edge of the shade.

After this band is put on, repleat the shade while the paper is still damp, to hold the shape. After the paste has completely dried you are ready to sew the paper on to the

frame, allowing the paper to stand up one quarter of an inch above the top wire of the frame. Catch the paper with needle and thread at four equidistant points, sewing from inside to outside with a very small stitch, then back to the wrong side, and tie with a strong little knot.

After you have the shade held firmly in this manner, take a needle and a long thread and sew each pleat at the top of the frame. Then do the same at the bottom. When this is finished put on a coat of thin shellac, orange or white, evenly with a brush, and your shade is done.

Then this is how the scrap basket is made:

First, buy an oval cardboard scrap basket (if you can't buy them at home, try the Box Mart, Madison Ave., at 54th Street, New York), then select a lining paper of a plain color that will harmonize with the Italian block-print paper which you intend to use on the outside. From this lining paper cut two strips, one and a half inches wide and as long as the circumference of the basket. Both of these strips should be snipped half an inch down to help in fitting. Then cut a piece to the inside dimensions of the basket but half an inch longer than the depth. Snip this extra half-inch to bend on to the bottom of the basket. I find that it is easier and less bulky to apply this lining piece if it is cut in half vertically. Next cut from the lining paper two oval pieces, using the bottom of the basket as a pattern. These pieces are for the inside and the outside of the bottom.

You are now ready to start pasting and lining. Lay your work on newspapers, as that is much the cleanest way to work. Be sure to have plenty of paste before you start, as a good deal is needed; also a brush about one and a half inches wide.

Now take the two strips first mentioned and paste one around the edge of the basket at the outside bottom, with the snipped edge on the flat bottom, the other to go around the top of the basket, with the snipped edge inside. Next paste in the back half of the lining, then the front half, being sure to bend down on to the bottom the extra half-inch mentioned above. Then put the oval pieces on the bottom, inside and outside. The lining work is now done.

The next thing is the outside covering of Italian paper. This should be cut to the outside dimensions of the basket, except that it must be about one inch shorter than the height of the basket. This will take two sheets. Your basket will be much improved by a band of trimming at top and bottom, such as we suggested for the lamp shade, where the Italian paper and lining piece meet.

After the basket has been covered and the trimming applied and the paste given plenty of time to dry, the last thing to do is to apply three or four coats of white or orange shellac to the outside, and one or two coats inside, letting each coat dry well before putting on the next.

I said above that the basket would take two sheets; there is just a chance that you can get it out of one. It is, however, advisable for the amateur to get enough paper, and as the cost is small your extra outlay of twenty-five or thirty cents will be worth while. Then, if you should have a sheet left, put your wits to work and see what you can make.

This paper is most decorative and popular just at present, and you will find, if you look about in the shops, that it is used for covering all sorts of things. If you have clever fingers, as I know you have, you can copy some of them; and I feel sure you will be delighted with the results.

Most sincerely,

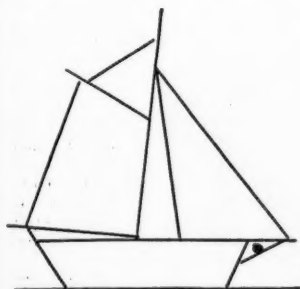
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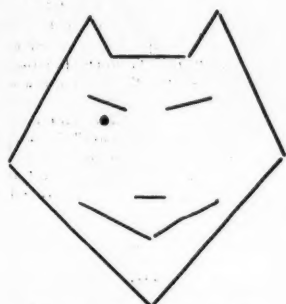
CHILDREN'S PAGE



A candle at night
Will give you good
light



Three good sails and a steady
boat
Fit for the king to set afloat

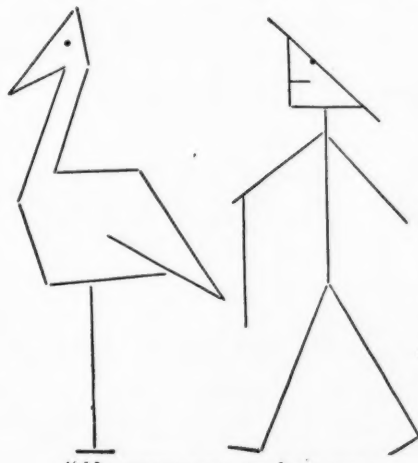


This Cheshire Cat's wink
Makes you stop to think

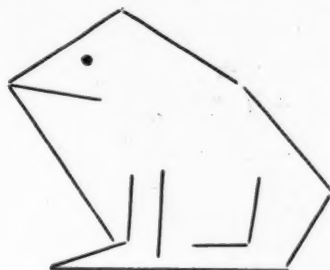
Here is an old
fellow
Whose nightcap
is yellow
And made with
a pointed
peak.
When he sings a
song
His mouth is so
long
That it bumps
right into his
cheek!



Lord Faunt-
leroy Fish
May be served
in a dish



"My crane can stand on one
leg,"
Says our jolly friend, Jim Peg



Smiling Mr. Frederick Frog
Has a house on Muddy Bog



Is this a pigeon or a crow?
I can't tell. Perhaps you know!

The Bush and the Volcano

By Winifred L. Bryning

THERE once lived a little, green bush in Sumatra that wanted to be of use in the world. "I have never helped anyone yet," he said to his only near neighbor, a volcano.

The volcano, which was a large, burning mountain, thought it funny to have a helpless little bush growing right at his feet.

"I can't see why you want to help anyone," answered the volcano.

That afternoon, a lovely little butterfly named Kallima Paralecta came to sip honey from some flowers on the mountain side.

The bush admired the butterfly very much. "I have often seen you," he said. "I think you are so beautiful. Please come and talk to me."

"But you have no honey," Kallima answered coldly. "I have no time to waste on you. You have no pretty colors, either; just plain, green leaves."

The bush felt very unhappy. When Kallima Paralecta had flown away the volcano spoke up. "The little imp!" he growled. "If there's anything I should like to wipe out, it's that conceited race of butterflies!"

"Oh, please don't," pleaded the little bush. "I love butterflies and all insects. They are so beautiful that it is a joy to see them."

The very next day Kallima came to the foot of the mountain and spent some time sipping honey from the flowers.

"Oh, Kallima," whispered the little bush, "do come here a moment and rest on my branches. You are not safe out there!"

"Not safe!" repeated Kallima Paralecta. "And pray what is to hurt me?"

"The volcano," whispered the little bush.

"Nonsense!" said Kallima.

Just then the volcano gave a fierce, grumbling sound, because he saw the butterfly whom he hated.

When Kallima heard the sound he was frightened; so he flew to the little bush and hid under his leaves. Then the volcano could not see him.

"Where are you? Where are you, you vain, conceited imp?" roared the volcano. But there was no answer.

When the danger was over, Kallima tried to spread his little wings and fly away.

"You shall never fly away from the little bush until you thank him properly," said a voice. It was the voice of Mother Nature.

The little butterfly hung his head for shame. "Thank you, little bush, for saving my life," he said. Then Mother Nature loosed his tiny feet.

From that day forth Kallima Paralecta and all his tribe were known as the leaf butterflies, and they had the power to look like leaves when they rested on a bush.

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A NEW CONTEST

How many pictures can you draw with twelve lines and one dot? Send me the greatest number of different new combinations you can think of.

First Prize..... \$5.00
Second Prize 3.00
Five Third Prizes of 1.00 each

Please draw on one side of your paper only—in pencil or with pen and ink. (Do not use paints or crayons.)

Mark your paper clearly with your name, age and address. If you have a small picture of yourself, send that too.

The contest closes on Monday, September 20, 1926, and any drawings that are postmarked after that day will have to be ruled out.

If you want your drawings or picture returned, please remember to send a self-addressed, stamped envelope that fits.

This contest is for all boys and girls up to twelve years of age who read this page in The Youth's Companion.

EDITOR OF THE CHILDREN'S PAGE

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Boston, Massachusetts

Learn to Play in 5 Minutes

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DON'T envy other boys and girls who have musical instruments and can play them. Play your own Banjo-Uke, a combination of the plaintive Hawaiian Ukulele and the American Banjo, and you will be one of the chosen few who is always in demand for house parties, picnics, camps—

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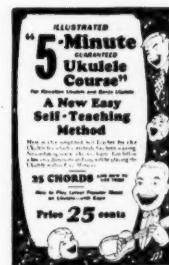
This wonderful instrument was popularized by the Prince of Wales, and now everybody is playing it. Its harmonious tones blend with the human voice, and you can get real melody from it as well as freakish and jazzy chords. A special feature is the waterproof head. You can play it outdoors without fear of damage from moisture. Get your Banjo-Uke today, and try all the old favorites and the new popular pieces.

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